Public Utilities

Volume 55 No. 10 May 12, 1955


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ARTICLES

FEATURE SECTIONS

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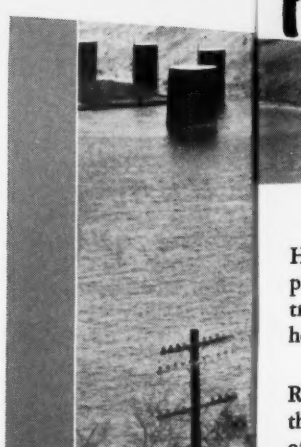
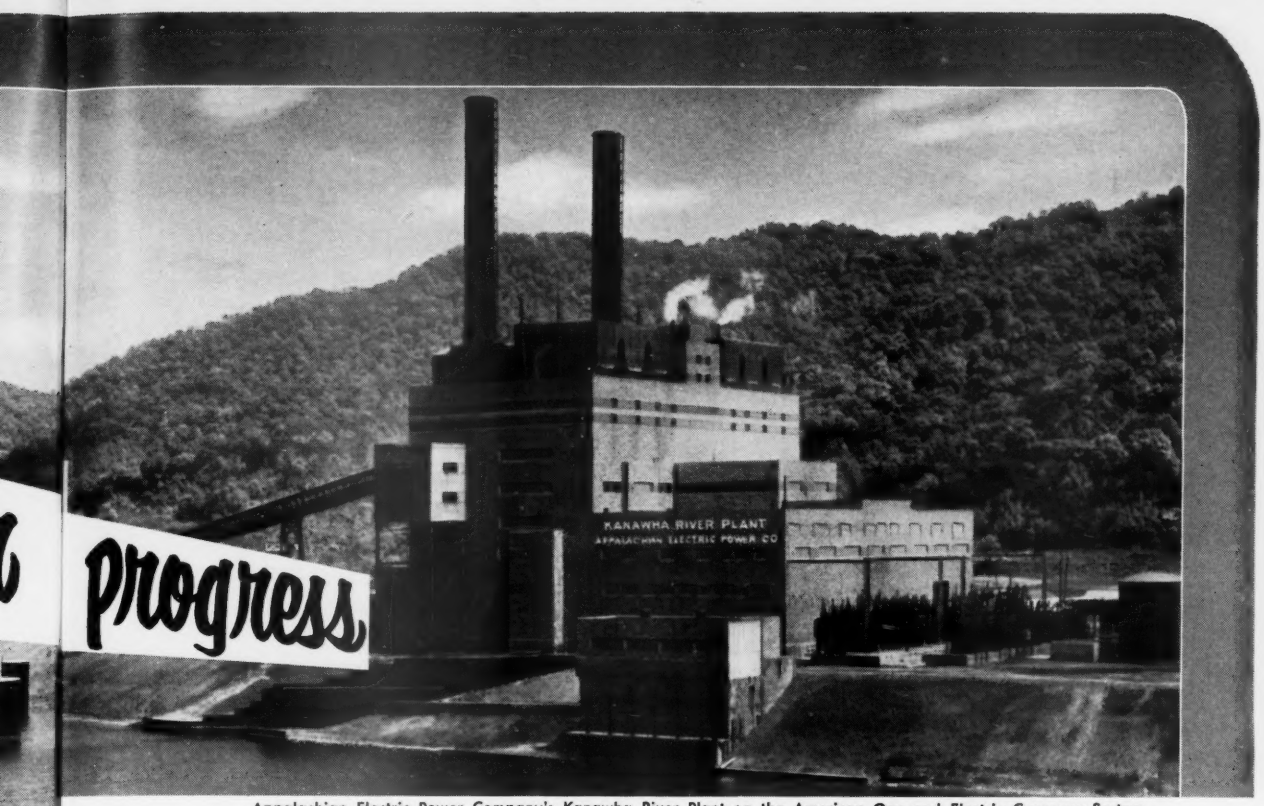


10 BEST ANNUAL HEAT RATES

(Plant Net Heat Rates)
Btu per kwhr*

9170 KANAWHA	**Appalachian Electric Power Co. on the American Gas and Electric System—** Two B&W Pressure-Fired Radiant Reheat Boilers with Gas Recirculation and Divided Furnace Construction.
9329 TANNERS CREEK	**Indiana and Michigan Electric Co. on the American Gas and Electric System—** Three B&W Pressure-Fired Radiant Reheat Boilers with Gas Recirculation and Divided Furnace Construction.
9418 ALBANY	**Niagara Mohawk Power Corporation.**
9454 SCHILLER	**Public Service Co. of New Hampshire—** Two B&W-built Mercury Boilers.
9510 DUNKIRK	**Niagara Mohawk Power Corporation.**
9540 J. R. WHITING	**Consumers Power—** Three B&W Radiant Reheat Boilers.
9594 PHILIP SPORN	**Appalachian Electric Power Co. and The Ohio Power Co. on the American Gas and Electric System—** Four B&W Pressure-Fired Radiant Reheat Boilers with Gas Recirculation and Divided Furnace Construction.
9630 ST. CLAIR	**Detroit Edison Co.—** Four B&W Radiant Reheat Boilers with Gas Recirculation and Divided Furnace Construction.
9661 EASTLAKE	**The Cleveland Electric Illuminating Co.**
9815 ASTORIA	**Consolidated Edison Co. of New York, Inc.—** Two B&W Pressure-Fired Radiant Reheat Boilers with Gas Recirculation and Divided Furnace Construction.

* Federal Power Commission figures



Appalachian Electric Power Company's Kanawha River Plant on the American Gas and Electric Company System.

Headed by a record 9170 Btu per net kwhr, these ten plants were the most efficient central stations in the country during 1953, the most recent year for which complete heat rate data are available.

Reflecting the decision of the electric companies to utilize the most recent engineering advances, even during a time of critical capacity expansion, the outstanding performance of these modern plants is a tribute to the foresight of the whole industry. It affords one more indication that the prime interest of this unique team of electric companies and their major suppliers lies in producing still lower-cost kilowatts for a still greater America.

B&W Boilers in many of these stations are designed with such advances as Pressure-Firing, Cyclone Steam Separators, Gas Recirculation and Divided Furnace Construction — features which have contributed substantially toward the outstanding efficiency levels achieved. Also, all steam generating units are equipped with reheaters, a development of major importance in improving plant efficiency.

Pressure-Firing

Among the many advantages of this important engineering advance, as utilized, for example, by the Kanawha River units, is elimination of air infiltration to reduce stack loss and assure greater efficiency. Maintenance is reduced and the use of forced-draft fans alone means easier starting, smoother operation and simpler controls. These are the reasons why more than 100 Pressure-Fired B&W units are now in service or under construction.

Cyclone Steam Separators

Operating inside the steam drum, these simple, stationary devices require no power or maintenance and do not take up building room. The Cyclone Separators assure positive natural circulation at high pressure, and with the steam scrubbers, make it possible to send steam of highest purity to the turbine. Consequently, turbine efficiency is maintained and turbine outages reduced.

Divided Furnace Construction

With this B&W construction, building volume is held to a minimum. Both sides of the furnace division wall are used to absorb heat and thus make it possible to achieve the required furnace cooling surface without excessive increase in building volume.

* * * * * *

The record heat rates set by these leading generating stations are closely followed by those of many more plants across the country which are producing low-cost kilowatts at efficiency levels unattainable just a few years ago. And B&W is continuing to devote its energies and its long-accumulated experience to the development of boiler designs that will contribute to still higher levels of steam generating efficiency. The Babcock & Wilcox Company, Boiler Division, 161 East 42nd Street, New York 17, N. Y.

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Pages with the Editors

IF the transit industry and the problem of daily mass transportation in our large cities continue to grow worse, it will not be for lack of study. As a matter of fact, the transit industry, which has been called the "sick man" of the public utility group, is getting an unprecedented amount of professional, political, and managerial attention all over the United States these days. Governors, mayors, regulatory authorities, and transit officials, along with civic and business organizations and voluntary groups, seem to be vying with one another in an effort to discover the solution to our mass transportation headaches.

OWEN ELY

THE root of the evil, of course, is a very simple physical fact which would not have challenged the ability of the late Professor Einstein to demonstrate. It is a fact which was recognized quite easily by the ancient Greek philosophers—that two or more bodies cannot occupy the same space at the same time. Organized transit facilities make the most economical use of time and space in transporting passengers to and from their work, as well as during off-peak hours. But before we can write any "QED" to the solution of such a seemingly easy problem, we come up against another hard fact—the refusal of the average American citizen to give up what he regards as his inalienable right to drive his own car downtown every day and park it somewhere—preferably without charge.

LINCOLN SMITH

IN recent months two state public service commissions, which happen by coincidence to be the two pioneer full-powered commissions in the American history of regulation—New York and Wisconsin—embarked on separate investigations to find out what makes the transit industry fail to run as it ought to. It is not contended that the result of these studies disclosed any magical solution or discovered any new ways and means to keep mass transportation on a commercial, efficient, and profitable basis, with due regard for the demands of public service. Yet the results of these studies, especially in comparison with each other, yield profitable lessons which can be learned and applied elsewhere.

THE leading article in this issue by our financial editor, OWEN ELY, is an examination of the Wisconsin and New York commission surveys of the transit headaches which are fast spreading the blight of slum growth in the hearts of our great cities. The steady exodus of both residential and business concerns to the suburbs and satellite cities is mute testimony to the malignancy of this economic cancer—the loss of efficient circulation of city trans-

OVER A MILLION new room air conditioners will be installed this year—latest industry estimate.

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BENEFITS FROM CAPACITORS (1) they allow two to three times more load to be carried on voltage-limited circuits. (2) Capacitors release thermal capacity—permit substations to carry more kilowatts. (3) They often pay for themselves out of savings resulting from reduced system I^2R losses.

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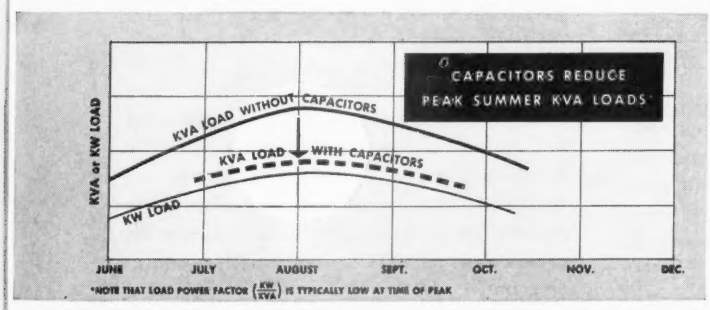
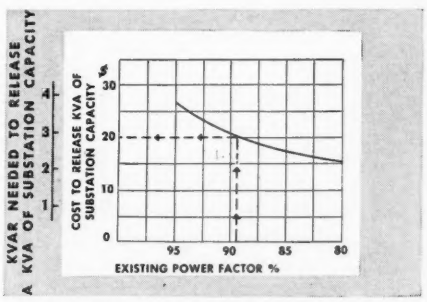


SUMMER PEAKS equaled or exceeded those of December in approximately 50 utilities last year, and these are low power factor peaks as shown above—a direct result of increased air conditioning loads.



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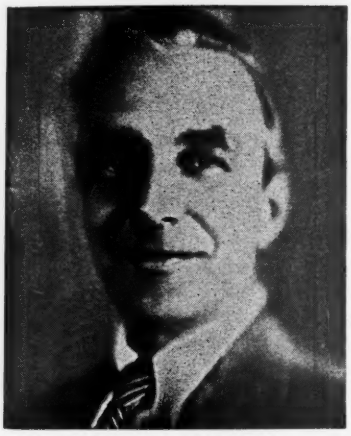
FOLLOWING the Easter recess, the House of Representatives Interstate and Foreign Commerce Committee resumed its business of hearings on legislation to exempt natural gas producers from federal regulation under the Natural Gas Act. It was the opposition's turn to give testimony —the proponents having had two weeks of favorable presentation before Easter. One of the most noteworthy features of this opposition was the mobilization of mayors of our large cities opposing any congressional action to relieve the independent producers from federal control. It is obvious that these mayors are convinced consumer interests will suffer if Federal Power Commission jurisdiction is relaxed, as proposed in the controversial Harris-Hinshaw bills.

THE proponents take the position, of course, that the real interest of the consumers will be better served if the legislation is enacted and that failure to do so will threaten the consumer's supply by killing the incentive of the producer to sell his gas for interstate commerce or discover new reserves.

WHATEVER the merits of these conflicting points of view, the discussions to date have emphasized a rather general lack of knowledge about the economics of the natural gas industry. The commercial producers and gatherers have been engaged in what they regard as an educational campaign showing tremendous investment involved in making new discoveries, the losses due to dry well drilling, and the other risks of the enterprise, which they feel is threatened by rigid federal regulation of an essentially competitive business activity.

MUCH remains to be done in educating the consumer and the public at large if the industry's problems are to be understood. And they must be understood before any degree of sympathetic reaction can be anticipated. The article entitled "Natural Gas Still Needs Explaining" (which begins on page 535) by JAMES H. COLLINS, author of business articles, now residing in Hollywood, California, is a revelation of some strange ideas which the public has about its natural gas service and the utility operations behind it from the wellhead to the burner tip. It is also an entertaining and thoughtful discussion of what some natural gas companies are doing about this situation.



JAMES H. COLLINS

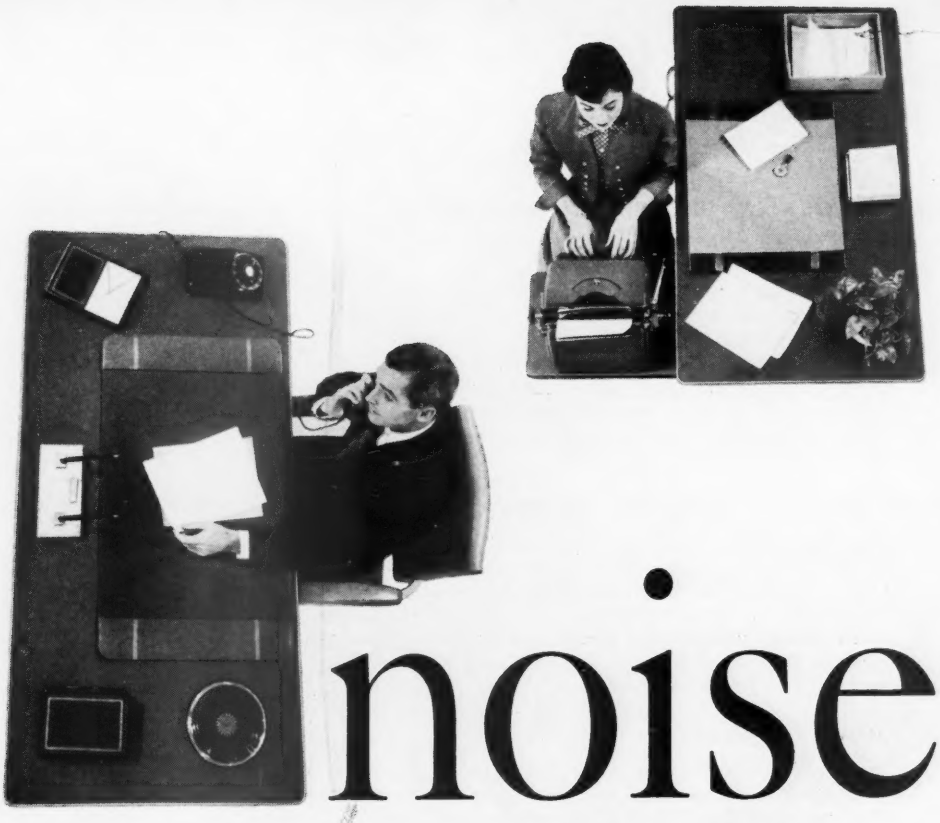
* * * *

IT has been said that "neither popular election nor gubernatorial appointment insures the selection of competent utility commissioners." In the second instalment of his 2-part series of articles, which appears in this issue, beginning page 542, LINCOLN SMITH, scholar in regulatory research, has made a careful examination of the arguments pro and con in the relative performance of the appointed and elected commissioners.

IN this instalment the author considers how problems common to both the elected and appointed commissions are handled by the two systems. He also gives attention to professional opinions of several authorities on the subject. The author states his own balanced conclusions on the respective merits of the two forms of selecting public utility commissioners.

THE next number of this magazine will be out May 26th.

The Editors



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DIVIDEND PAYOUT AND UTILITY COMMON STOCK VALUE

In the current controversial "bull market" the long-standing argument over conservative as against liberal dividend payout policy is being resumed in financial circles with renewed vigor. The discussion has become particularly active with respect to dividend payout on utility stocks and its relation to common stock value. Dr. Fred P. Morrissey of the school of business administration of the University of California, Berkeley, points out that common stocks of utilities which have followed a low payout policy have, nevertheless, experienced very substantial market gains. Dr. Morrissey indicates that investors may be valuing retained earnings fairly high in the hope that these retained earnings will mean greater dividend stability or higher future dividends or both.

WHAT DO ANALYSTS LOOK FOR IN COMPANY REPORTS?

This is a novel feature for exclusive publication in PUBLIC UTILITIES FORTNIGHTLY in the form of an actual report of a panel discussion by four top-flight security analysts at a recent utility management meeting held in Cincinnati, Ohio. The purpose was to inform corporate officials of public utility companies how these security analysts view annual and other reports made on behalf of management for the enlightenment of the investing public. The four analysts and their professional association can be briefly described as follows:

JOHN F. CHILDS

Vice president of the Irving Trust Company. He is head of the public utility department of that organization and presided over the panel discussion. He stresses the importance of the "investor relations program" to every utility company and the necessity for appealing to both the informed and the relatively uninformed investors who must rely on the informed investors. His discussion is confined to written material.

LONGLEY G. WALKER

Security analyst with Stone & Webster Securities Corporation, and chairman of the program committee of the New York Society of Security Analysts, describes the rôle of the "president's letter" and the usefulness of "high lights" in bringing out for the investor those points which the management wants to underline. He also discusses the use of charts and tables.

HUGH PASTORIZA

Security analyst with Coffin & Burr, considers the function of the statistical booklet, and points out that while annual reports are designed for a wide audience, the statistical booklet is designed for the specialist. He describes what should be in it to meet that requirement.

MARJORIE H. CRUTHERS

Administrative assistant, public utility department of Irving Trust Company, gives an account of the function of the quarterly report—to keep investors up to date on the company's changing conditions. What should be in the quarterly report and what should be omitted?

★

Also . . . ***Special financial news, digests, and interpretations of court and commission decisions, general news happenings, reviews, Washington gossip, and other features of interest to public utility regulators, companies, executives, financial experts, employees, investors, and others.***

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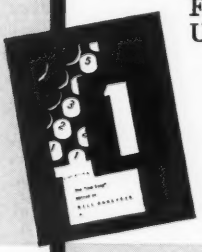

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Chairman, Federal Reserve Board.

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HOLMES ALEXANDER
Columnist, Los Angeles Times.

"The country is a lot wiser, more serious, more grown-up than many of its critics think."

G. KEITH FUNSTON
President, New York Stock Exchange.

"Education is a painstaking process, knowledge cannot be legislated, or shot into the bloodstream."

ROBERT E. WOOD
Chairman of the executive committee, Sears, Roebuck & Company.

"I have always believed that the strongest support of the capitalistic system is the making of more capitalists."

JOHN T. KIMBALL
Vice president and general manager, Idaho Power Company.

"We have seen what happens, even in America, when people get things they don't earn. It corrupts and degenerates."

THOMAS B. MCCABE
President, Scott Paper Company.

"We must show our employees, that their goals and those of management are one and the same, and that neither can be attained without the other."

HAROLD W. DODDS
President, Princeton University.

"A university can arrange no ideological compromise with Russian Communism . . . we must condemn it as we condemn every form of totalitarianism."

A. WHITNEY GRISWOLD
President, Yale University.

"The interest in vocational education has tended to eclipse other education. I don't believe liberal education should displace vocational but it should be in addition to the other."

DON T. MILLER
Publisher, Inland Empire News (Spokane, Washington).

"The majority of people of the Northwest . . . hope, I believe, that the Snake river will be developed by American competitive, free enterprise, which would get the job done sooner and protect the water rights of the people of Idaho."

MORGAN REICHNER
Executive director, American Economic Foundation.

"Our studies show that American employees are interested in their jobs, in job security, and in the company's problems. It is best that management tell employees about the company's problems so everyone will understand what all face."

Excerpt from annual report, New York Central Railroad.

"Why is it, when the federal government and our states and cities are struggling with unbalanced budgets to maintain facilities and services, gratis for barges, planes, trucks, buses, and automobiles, so little attention is given to the direct recovery of these costs in user charges?"

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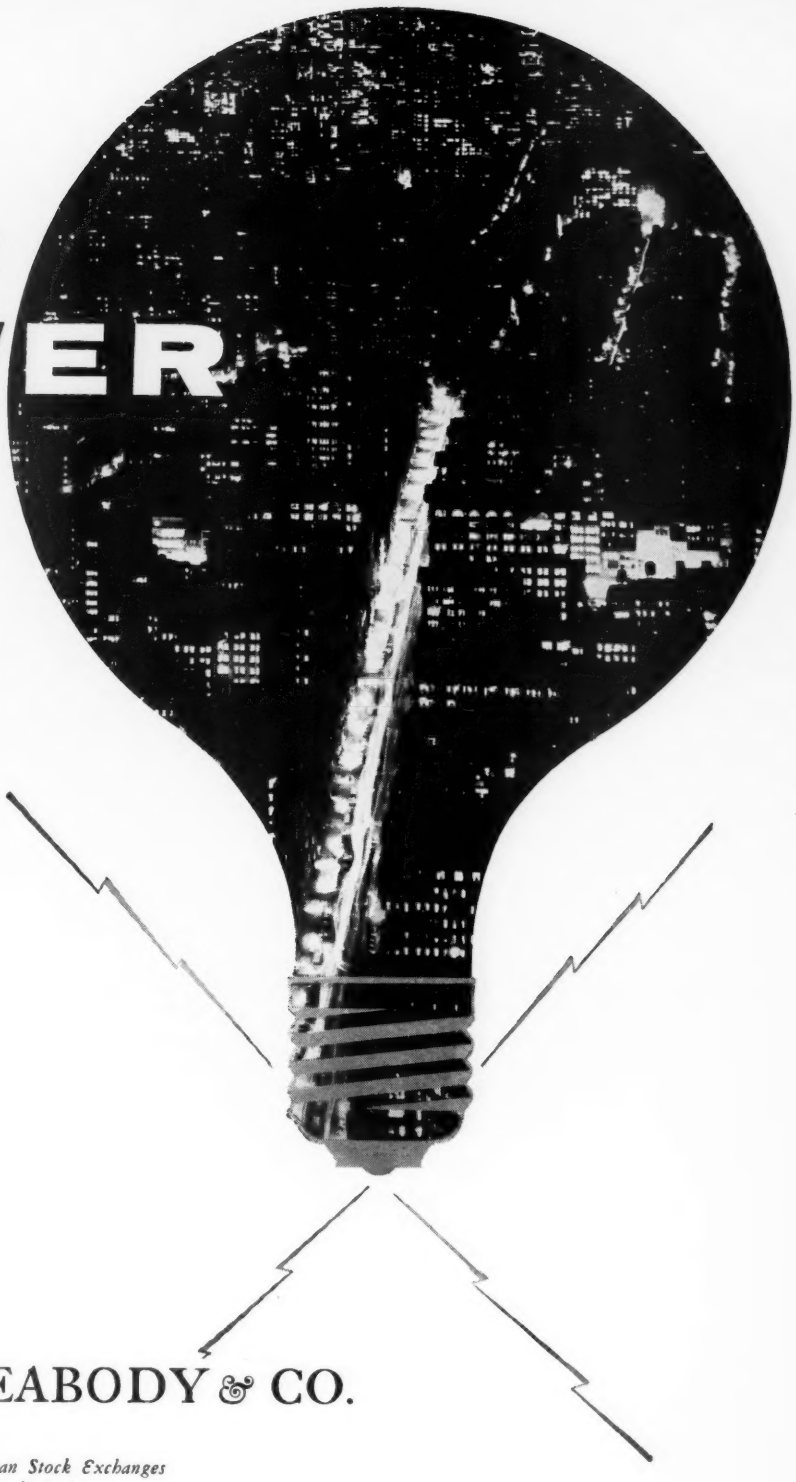

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Excerpt from annual report, Standard Oil Company (New Jersey).

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RALPH J. CORDINER
President, General Electric Company.

"Only a greatly accelerated rate of application of new knowledge to products, processes, services, and materials can enable us to meet the multiple demands of our country's progress. Business' objective is to apply new knowledge to the fulfillment of these needs as rapidly as possible."

ELISHA GRAY II
President, Whirlpool Corporation.

"Effective employee relations like charity, begin at home—in the office of the company's executives. . . . [It] perhaps, boils down to this simple proposition: Pride in being part of a company; loyalty to a company; devotion for the job—these things can be earned depending upon what management does."

ROBERT R. YOUNG
Chairman of the board, The New York Central Railroad.

"Either our freight, commutation, passenger express, and mail services must be put on an equality of regulation, subsidy, and taxation with the waterways, airways, and highways, or our services must eventually be wholly performed by them, inadequate and much more costly though they are when their subsidies are included."

EUGENE J. MCCARTHY
U. S. Representative from Minnesota.

"In a democracy we are always faced by the joint problems of how much liberty and how much control should be permitted. When the government decides to suppress error, it must determine whether the error is real, whether it is destructive, and whether the good derived from correcting the error outweighs the danger of the practice itself."

HENRY G. WALTEMADE
President, National Association of Real Estate Boards.

"We can—and we must—do more to demonstrate the futility, the misdirected good intention, the social danger, the political bear trap, the wrong-way effect, and the inequities that are embodied in the principle of government ownership and operation of family dwellings, being foisted upon the American people by socialistically inclined do-gooders and political opportunists."

ROBERT R. DOCKSON
Professor and head of the department of marketing, University of Southern California.

"American business is supported by powerful underlying forces that will enable our level of production approximately to double within the next twenty years. Whether we achieve this level or not will depend largely upon our ability to keep the economy free and the businessman stimulated to the extent that he is confident his profits will increase if he expands his productive capacity."

GEORGE C. S. BENSON
President, Claremont Men's College.

"We may well speculate how long the mayors of our towns and the governors of our states will be a necessary part of our leadership when fiscal and managerial control of our local affairs is passing to the congressional committees which allocate the grants for agriculture, airports, education, child welfare, highway construction, veterans' services, wildlife restoration, and a host of other services."

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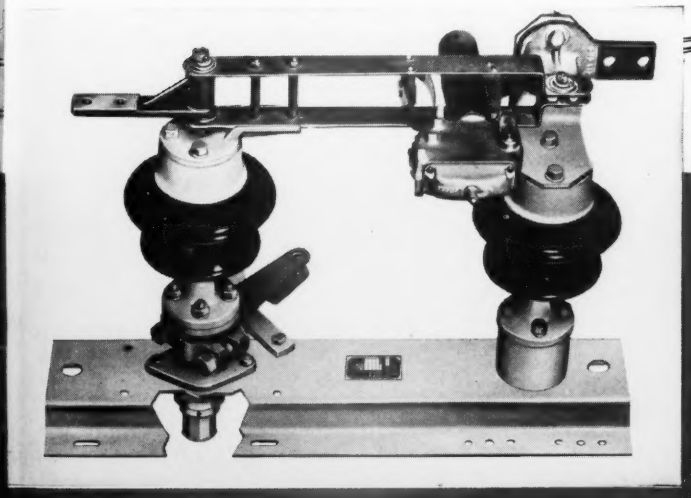

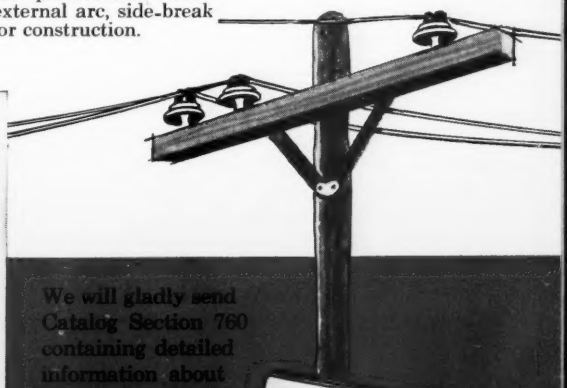

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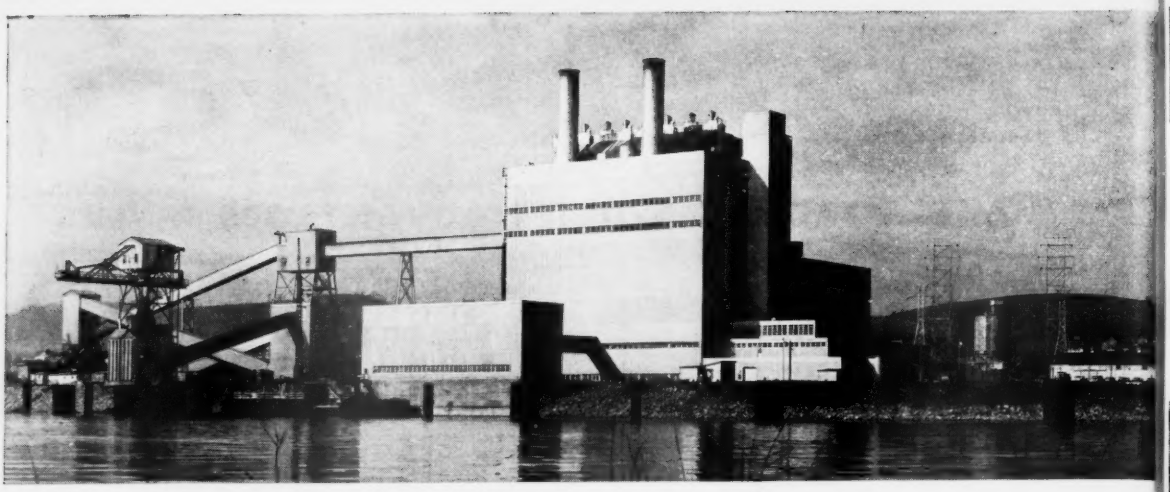

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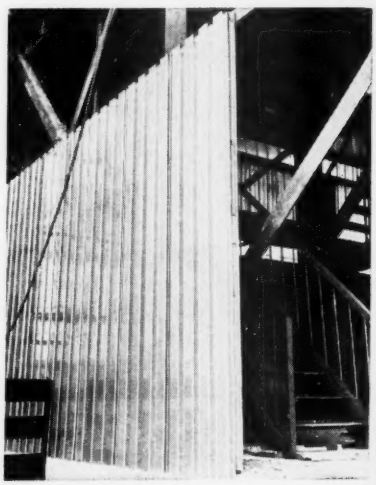
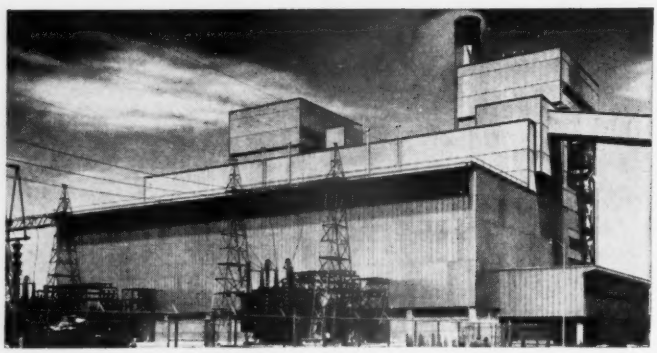


Q-Panel walls (above) go up quickly in any weather because they are dry and hung in place, not piled up.



More than 32,000 sq. ft. of Q-Panels were use to enclose the impressive Hawthorn Stea Electric Station (left) of the Kansas City, Mi souri, Power and Light Company. Ebasco Se vices, Inc., designed and built the plant.

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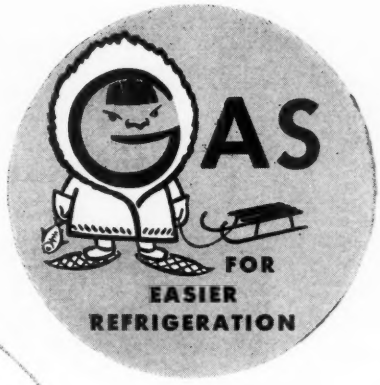

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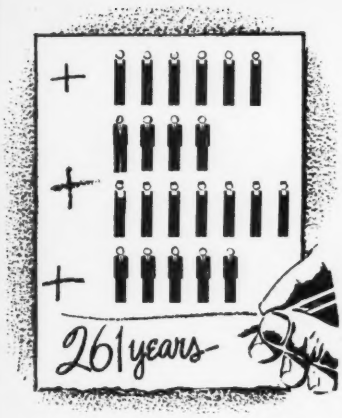
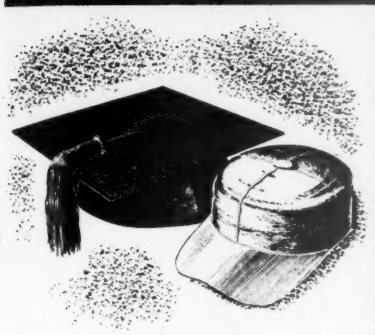


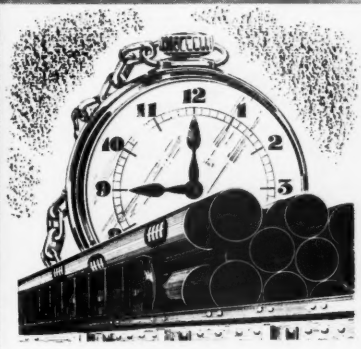
STICK-TO-IT EXPERIENCE

'ROUND THE CALENDAR DEPENDABILITY



TWO-WAY ABILITIES

PIONEER'S KNOW-HOW



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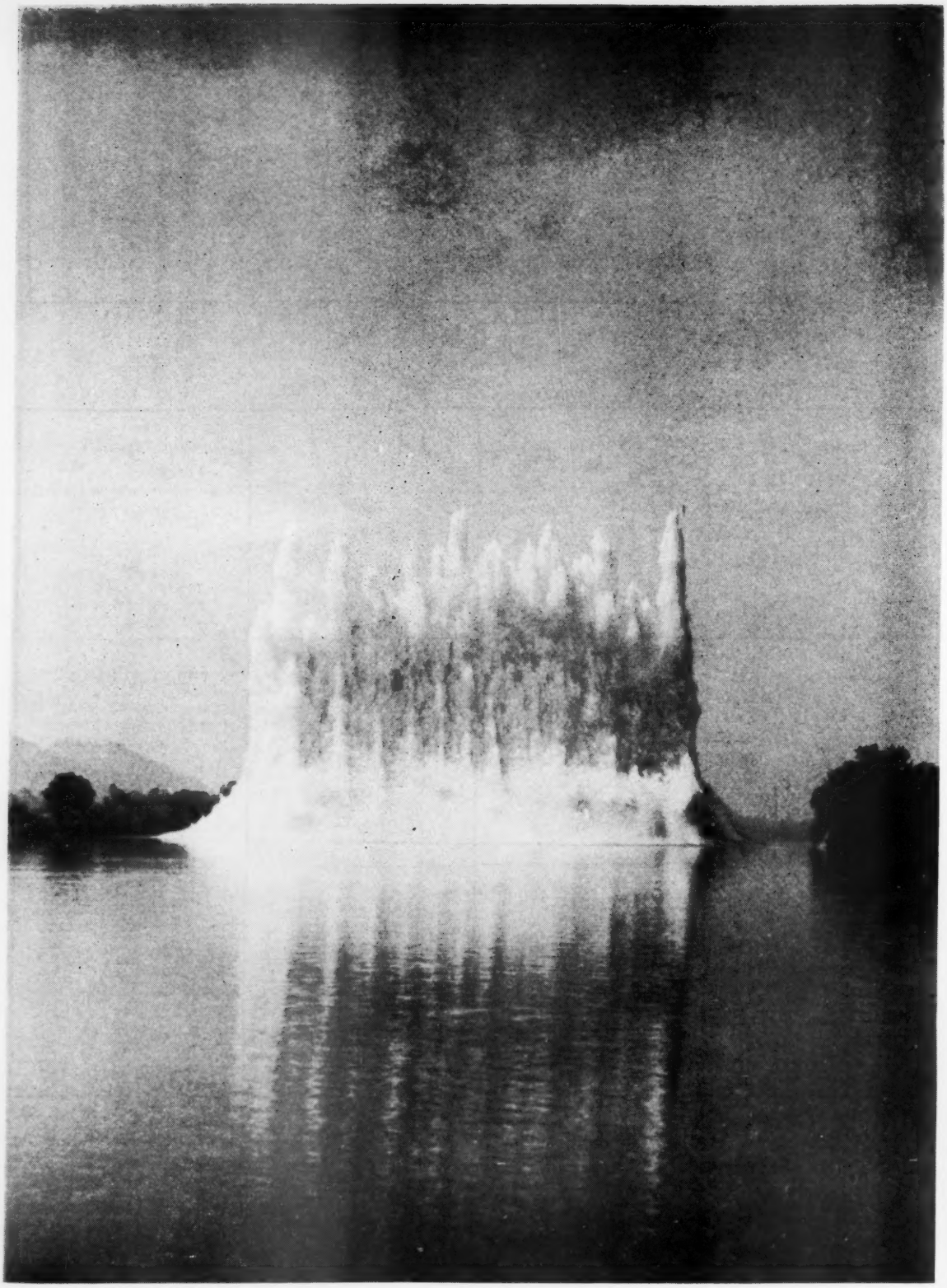
MAY

Thursday—12 *New York State Society of Professional Engineers begins annual convention, New York, N. Y.*	**Friday—13** *Pacific Coast Electrical Association ends 3-day annual convention, San Francisco, Cal.*	**Saturday—14** *National Rivers and Harbors Congress will hold national convention, Washington, D. C. May 31-June 1.* ***Advance notice.***	**Sunday—15** *Utility Management Workshop begins, Harriman, N. Y.*
Monday—16 *Southern Gas Association begins annual convention, New Orleans, La.*	**Tuesday—17** *Pennsylvania Gas Association begins meeting, Pocono Manor, Pa.*	**Wednesday—18** *National Telemetering Conference-Exhibit begin, Chicago, Ill.*	**Thursday—19** *Illinois Telephone Association begins annual convention, Peoria, Ill.*
Friday—20 *Edison Electric Institute ends 2-day Dealer Co-ordination Workshop, Pittsburgh, Pa.*	**Saturday—21** *American Water Works Association, Pacific Northwest Section, ends 3-day annual meeting, Yakima, Wash.*	**Sunday—22** *National Association of Electrical Distributors begins annual convention, Chicago, Ill.*	**Monday—23** *Kansas-Missouri Telephone Association begins joint convention, Kansas City, Kan.*
Tuesday—24 *The Institution of Gas Engineers begins meeting, Portsmouth, England.*	**Wednesday—25** *American Gas Association ends 3-day chemical, engineering, and manufactured gas production conference, New York, N. Y.*	**Thursday—26** *National District Heating Association ends 4-day annual meeting, Chicago, Ill.*	**Friday—27** *North Central Electrical Association, Accounting Committee, begins meeting, Fergus Falls, Minn.*



Courtesy, United Fuel Gas Company

Preparing a Path for Pipeline Passage

A nearly 1,000-foot tower of water followed a blast on the Kanawha river bottom.

Public Utilities
FORTNIGHTLY

VOL. 55, NO. 10 MAY 12, 1955

Wisconsin and New York Commissions Diagnose Transit Headache

The so-called "sick man" of the public utility industry is getting plenty of professional and political, as well as managerial, attention all over the United States these days. In recent months, both the New York and Wisconsin commissions—pioneering regulatory authorities of the country—embarked on separate investigations to find out what makes the transit industry fail to run as it should do. This article examines the results and possible lessons to be learned from these studies.

BY OWEN ELY*

DURING the postwar period the operations and earnings of the transit industry have gradually deteriorated. The failure of New York city's subway system to pay its way and finance necessary improvements, and the clashes between the new Transit Authority and Mike Quill over wages, have been well publicized, but the difficulties of the private segment of the industry have been less in the limelight. Many of the larger bus companies were reorganized in the 1930's, with little or no long-term debt, and they are still able to live on the fat accumulated during World War II when the industry enjoyed a period of false

*Financial editor, PUBLIC UTILITIES FORTNIGHTLY, resident in New York, New York. For additional note, see "Pages with the Editors."

prosperity. The smaller companies, however, are rapidly falling by the wayside, as indicated by the recent report of the New York Public Service Commission that 50 bus companies had gone out of business in the last two years.

The basic cause of the transit dilemma is, of course, the gradual encroachment of private automobiles on city and suburban bus transit. Not only have the auto companies "stolen" much traffic from the buses, but they clog the city streets (both in motion and when parked at the curb) and slow up the buses, increasing operating costs and making bus service less popular. As we shall see later, there are other problems, such as local taxes and regularly increasing wage rates, but the major problem is the automobile as a traffic "hog."

In the postwar period, as shown in the chart on page 527, there has been a very close relationship between rising automobile registrations and declining transit passengers.

Most cities are still heavily dependent on buses, however, for the mass transportation of millions of workers from home to factory and back, to shopping centers and theaters, etc. Private cars would obviously be unable to do the entire job even if every apartment dweller owned a car. Moreover, transit by bus is much more economical as to traffic space and cost of operation; a single bus can carry as many passengers as thirty private cars.

Both city and state authorities throughout the country are now becoming genuinely alarmed by the plight of the transit industry and are agreed that "something must be done about it." But the problem is so many-angled and complex that there is no immediate and obvious solution. At least three states—Massachusetts, Wisconsin, and New York—have appointed fact-finding commissions. In this article we shall attempt to summarize the reports recently published by the New York and Wisconsin commissions. (The data for the chart on page 527 were obtained from the two charts contained in these reports.)

In 1953 the New York legislature passed a bill to repeal the 2 per cent gross income tax on bus companies, but the bill was disapproved by the governor, who held that such relief would be only a temporary palliative. He stated that the underlying problems were "sufficiently broad and complex as to justify a thorough study, which should include as one of its items the impact of taxes." Accordingly, he appointed a special committee of five, headed by Glen R. Bedenkapp, to study the financial problems of privately owned bus companies in the state.

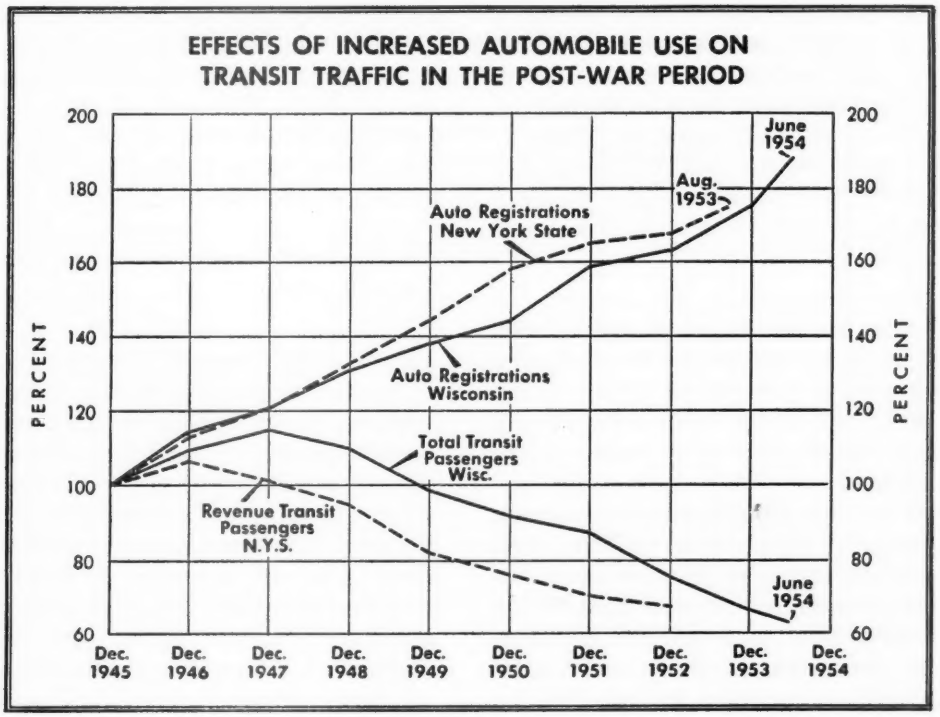
In its 1954 report the committee stated that "there is no single level of government which presently exercises sufficient control to effect a solution . . . While government may aid in various ways, management, labor, and the public must cooperate . . . The unfortunate fact is that knowledge of existing conditions either has not seeped down to the mass of people who have the greatest stake or, if it has, they have not been sufficiently aroused to require appropriate action."

The study pointed out that the bus problem has become serious only in recent years. During World War II, when automobile production and maintenance were greatly curtailed and many factories were running extra shifts, the number of transit

passengers in the principal cities more than doubled over the average level in 1936-40. However, with the gradual increase in the supply of automobiles and other postwar changes, the situation has changed radically so that many transit companies, operating on a reduced load factor, find it difficult to make both ends meet despite rate increases.

In 1952 municipal transit lines in New York city carried over two billion revenue passengers, while the private bus companies in the state transported a billion. In other words, there were 200 transit rides during the year for every man, woman, and child in the state. Of some 223 privately owned bus enterprises, 40 per cent owned less than six buses and 82 per cent less than 26. Few of the large companies had long routes, most of them operating as city transit systems and as feeders of long-distance facilities such as railroads, airlines, Greyhound buses, etc. However, the many small interurban operations performed valuable services in less thickly populated areas. But despite smaller overhead, the mortality rate among these small companies was very high, with 14 per cent discontinuing operations in the two years preceding the report.

THE committee estimated that more than 60 per cent of all persons entering the downtown area of cities over 100,000 population still use mass transportation. The more highly congested the area, the more dependent it is on mass



transit. Construction of wide boulevards and arterial highways may speed the movement of private passenger cars toward congested business areas, but the result is increased traffic demoralization in these areas. The committee stated:

> Gradual acquisition by New York city of various privately owned surface transit lines is tangible proof that such a development is the logical result of the inability of private management to survive under unfavorable conditions. The public need must be satisfied either by private enterprise equipped with the knowledge and proficiency to make the business pay or by a municipal agency which taps the city treasury to meet its deficits.

The taking over of private transit by municipalities, with a saving of numerous taxes (in New York state there are at least 11 types of such taxes), should in theory permit lower fares, but this has not been reflected in actual operation. Thus, in Chicago, Detroit, and Seattle public-operated transit systems charge 20 cents, compared with 15 cents in New York city.

IN the county of Queens (New York) municipal and private bus companies operated side by side in 1952 with the same fares, about the same wages, and a comparable volume of business. The municipal system paid no taxes and charged no depreciation (the taxpayer paying for replacements) while the four privately owned bus lines paid out $900,000 in taxes and charged $460,000 depreciation or a total of $1,360,000. Revenue passengers per bus mile were 8.32 for the private companies and only 5.84 for the municipal system, possibly indicating that the municipality furnished more service per mile of route, with a correspondingly smaller load factor. However, this does not explain the wide discrepancy in earnings. The municipal operation lost over $3,000,000 (equivalent to $4,360,000 with taxes and depreciation) while the four private enterprises earned net income of almost $690,000. The difference was mainly in the cost of operation and maintenance, the politically run operations reflecting the usual lower efficiency.

The report also noted that in 1952 the rapid transit and surface operations of the New York city municipal system incurred total losses of over $33,000,000, excluding depreciation. The table on page 530, furnished by the American Transit Association, compares 1945 and 1953 earnings for seven large municipal transit systems and indicates the losses being currently incurred *before depreciation and charges* by some of them. It is obvious, therefore, that the public has to pay a much higher price (fares and taxes combined) when the municipality takes over the job of supplying mass transit. Hence every effort should be made to permit private management to survive.

IN addition to competition and congestion due to private autos, other factors have been adverse to the transit companies —establishment of a 5-day week, loss of off-peak evening travel due to TV, and reduction in passenger volume due to fare increases. (Traffic engineers estimate that every 10 per cent increase in the average fare is partially offset by a 3 per cent loss in volume.) Car pool riding, a wartime device which still survives, is a "devastating competitor of bus transit." Transit

The Cause of the Transit Dilemma

"THE basic cause of the transit dilemma is, of course, the gradual encroachment of private automobiles on city and suburban bus transit. Not only have the auto companies 'stolen' much traffic from the buses, but they clog the city streets (both in motion and when parked at the curb) and slow up the buses, increasing operating costs and making bus service less popular. . . . there are other problems, such as local taxes and regularly increasing wage rates, but the major problem is the automobile as a traffic 'hog.'"

companies have, of course, been affected by the rapid rise in wages and other labor costs which absorb nearly 60 per cent of revenues. The impact of a transit wage increase is much greater than for other kinds of utilities—two or three times as heavy as for electric, gas, and water utilities, and almost one-half again as burdensome as for the large telephone utilities.

THE report devoted a number of pages to the discussion of the impact of taxes, listing 17 different federal, state, and local taxes. Here again the burden is usually heavier for the bus company than for the gas and electric companies, particularly as related to operating income. Thus, the New York state 2½ per cent gross earnings tax took an even 50 per cent of the operating income of 15 medium-sized bus companies in 1952 (and 37 per cent for the larger ones), while it amounted to only about 10-18 per cent of operating income in the case of 25 electric-gas utilities. The burden on the small bus companies was even heavier since about half of them operated at a loss and the others had very small earnings.

THE report concluded that any industry so situated that 45 per cent of its companies averaging $280,000 in revenues cannot even pay operating taxes (or interest) without invading reserves, is in serious trouble. The substantial amounts paid to the state for fuel taxes—over $2,500,000 in 1952 — are unwarranted when it is considered that the buses travel at least 90 per cent of their mileage on city streets rather than on the open highways—although the tax is imposed principally to aid in the construction of the latter. The Highway Planning Commission has been considering general increases in taxes on both gasoline and diesel fuel oil, plus higher registration fees, which would impose further burdens. A revision and reduction of the tax burden on the transit industry are therefore urgently needed.

The committee made spot checks on the effects of traffic congestion on bus operations. In Buffalo bus speeds in outlying areas were found to be as high as 16 miles an hour, but they dropped as low as two to five miles in congested areas during rush hours. United Traction Company, serving Albany, found that the scheduled speed on eight routes had to be reduced 20-28 per cent and on five routes 7-20 per cent during 1948-52. The congestion had indirect adverse results, such as grouping of buses and resultant overcrowding in the first bus — while others would trail along with few passengers.

SEVEN LARGEST PUBLICLY OWNED TRANSIT COMPANIES
OPERATING REVENUES AND INCOME

	1953	1945
Operating Revenue		
New York	$241,787,089	$126,143,615
Chicago	124,103,963	81,214,425
Detroit	46,780,362	35,722,796
Cleveland	29,762,769	21,947,641
Boston	36,993,650	37,574,781
San Francisco	22,835,857	14,783,188
Seattle	10,717,953	9,689,327
Total	$512,981,643	$327,075,773
Operating Income		
New York	(d)$ 21,586,520	$ 23,048,093
Chicago	7,878,741	7,706,278
Detroit	3,118,359	1,628,568
Cleveland(a)	2,454,111	3,694,550
Boston	(d)3,572,091	9,425,835
San Francisco	(d) 94,071	1,824,170
Seattle	204,979	2,665,732
Total	(d)$ 11,596,492	$ 49,993,226

(a) After reserve for replacement fund.
(d) Deficit.

VARIOUS remedies for congestion have been advocated or tried—one-way streets, restrictions on street parking, construction of arterial and by-pass routes, staggered employment shifts, and limitation of truck loading and unloading to off-peak hours. However, these remedies have been tried only sporadically and in most cases without an over-all, well-enforced program.

"The building of expressways into congested areas speeds the arrival and departure of motor vehicles," the report stated, "but unless carefully planned, produces indescribable confusion within central business districts . . . The great contradiction is that, through increasing costs and reducing patronage, traffic congestion is one of the most potent forces driving the privately owned motorbus company out of business — yet that same bus company could be one of the best instruments for alleviating the consequences of the problem."

The traffic problem must, of course, be handled at the municipal level—there is not much the state can do about it.

IN March, 1954, Governor Kohler of Wisconsin appointed a 5-man commis-

sion to study the mass transportation problem in that state and recommend administrative legislative proposals to meet current problems. He pointed out that the larger Wisconsin cities were nearing a crisis over mass transit, with increased costs and declining passenger volumes forcing fares upward and making it difficult for transit firms to operate at a profit. Unless a solution could be found, transit facilities might be abandoned and many city residents would find it difficult to travel to and from their place of employment or to shopping centers.

THE commission held public hearings with various groups, including the owners and managers of the transit industry, mayors and other city officials, city traffic engineers, representatives of businessmen's associations, and motor club representatives. Questionnaires were mailed to the transit companies and municipalities and a subcommittee representing the industry was formed. The Wisconsin Public Service Commission made available the services of members of its staff. A great deal of general information on the industry was assembled from sources in and outside the state.

The commission published the operating ratios for 31 urban bus systems in Wisconsin for the calendar year 1953. The largest system is the Milwaukee & Suburban Transport Corporation with revenues of over $19,000,000, accounting for about three-quarters of the total revenues of the 31 systems. This company had an operating ratio of 92.8 per cent compared with 94.1 per cent for the combined results for the 31 systems. There were, however, 14 systems (most of them quite small) which failed to cover their operating expenses, though possibly most of them were able to cover cash costs before depreciation accruals. One of the worst showings was made by the municipal system in Jamesville with an operating ratio of 118 per cent.

BALANCE sheet data were presented for 19 companies showing that in general adequate depreciation had been charged. Milwaukee & Suburban Transport had an average reserve of 53 per cent of book cost, Madison Bus 78 per cent, Wisconsin Public Service 85 per cent, etc. Most of the smaller transit companies had comparatively little funded debt—in general, debt had been incurred for equipment purchases. However, Milwaukee & Suburban Transport had debt of $6,500,000 against net property account of $13,400,000. Current financial position differed widely, but 9 of the 29 companies (including Milwaukee & Suburban) reported

¶ "DURING *World War II, when automobile production and maintenance were greatly curtailed and many factories were running extra shifts, the number of transit passengers in the principal cities more than doubled over the average level in 1936-40. However, with the gradual increase in the supply of automobiles and other postwar changes, the situation has changed radically so that many transit companies . . . find it difficult to make both ends meet despite rate increases.*"

larger current liabilities than current assets.

There is only one municipally operated transit system in Wisconsin, and the report gave a "case history" of this. The city of Jamesville took over the municipal transit system in 1952 when the company decided to abandon service because of constantly mounting losses. In 1944 the bus system had been sold along with lines in other cities to experienced bus operators, but within two years the lines had changed hands twice more. The last of the private owners made an initial effort to provide good service, buying new equipment and providing frequent service and new routes, but the number of riders declined from the peak of 2,400,000 in 1947 to 1,500,000 in 1951. While the company made corresponding cuts in service, earnings deteriorated and its finances became unhealthy. At a civic meeting called in April, 1952, general support toward a fare increase was evident, but the company felt that this would be "suicidal" and it also opposed possible subsidies by the city or other interests. Publicity failed to stimulate use of the lines and efforts to sell the property to other bus operators failed.

Negotiations were then initiated for the city to buy the property and a special election was called. The city council warned the public that if the system was to be made as nearly self-supporting as possible, late evening and Sunday afternoon service might be abandoned, and route changes made. Thus the council forestalled the criticism which municipal bus systems in other cities have encountered when service was curtailed. The city engaged a transit expert and minor improvements and economies were made, but even following a fare increase the service continued in the red.

THE commission's report (pages 8-10) gave a long list of practical suggestions for dealing with the transit problem. To cope with traffic congestion, municipalities were urged to consider these steps:

1. Increased fines and strict enforcement of traffic and parking violations which block the movement of traffic.
2. Necessary ordinances should be enacted to provide bus loading zones of adequate length, and they should be written so as to prohibit the standing, loading, or unloading of vehicles other than buses in the designated zone area.
3. Strict enforcement of ordinances prohibiting double parking of any kind.
4. Necessary truck loading zones should be provided, and the length of such zones should be adequate to allow trucks to park parallel to the curb.
5. In order to obtain the maximum use of streets in congested downtown areas and to allow for a smoother, more rapid traffic flow, curb parking should be banned in these areas. Zones should be designated for loading and unloading of trucks during off-peak hours.

Business organizations were urged to co-operate with municipalities on parking and truck problems. The same inducements should be given to transit users as to users of private automobiles. Staggered employment hours to alleviate peak loads should be worked out, and a later closing hour for retail stores considered.

THE commission urged the transit industry and the municipalities to work together to improve the transit "convenience factor." It stated:

Regulatory Concern over Transit Problems

"MOST cities are still heavily dependent on buses . . . for the mass transportation of millions of workers from home to factory and back, to shopping centers and theaters, etc. Private cars would obviously be unable to do the entire job even if every apartment dweller owned a car. Moreover, transit by bus is much more economical as to traffic space and cost of operation; a single bus can carry as many passengers as thirty private cars. Both city and state authorities throughout the country are now becoming genuinely alarmed by the plight of the transit industry and are agreed that 'something must be done about it.' But the problem is so many-angled and complex that there is no immediate and obvious solution."

Public officials, businessmen, and business associations must realize and should recognize that *streets are built primarily for the movement of people and goods and not for the storage* of vehicles and that until the problem of traffic congestion is faced squarely, a downward trend of transit riding will continue, with inevitable insolvency and bankruptcy of the privately owned companies and subsequent public ownership and operation.

The public service commission should authorize extensions of routes of service on a limited time basis, to expire automatically unless further extension is requested. Fare changes should become effective on five days' notice, and increases should be authorized on condition that they should not result in an operating ratio below 95 per cent (before income taxes) and should be subject to investigation and possible modification after a 90-day trial period.

In general, a fare structure was suggested which would provide an operating ratio between 92 and 95 per cent, unless a lower ratio is necessary to provide a return of 8 per cent on the rate base.

The legislature was urged to finance a more exhaustive investigation, the cost of which would be paid as follows: 50 per cent by state fund, 25 per cent by the transit agency, and 25 per cent by the municipality. Since the problem is related to cost of street widening and construction, state funds should be raised as part of the highway users' tax, and should be under the administration of the State Highway Commission. The public service commission should also be given sufficient funds to help expedite transit proceedings. Legislation should also be enacted to permit a municipality to contract for trial periods of extensions of service.

URBAN transit should also be *exempted from all local and state taxes and should become subject to a special income tax*. After allowance for expenses, federal income taxes, and earnings of 8 per cent on net plant cost, remaining net income should be taxed at a 50 per cent rate with tax proceeds apportioned to local units of government. "The main purpose of the proposed tax revision," the report stated, "is to permit full use of the operating ratio as a means of determining reasonable fares in order to stabilize as far as possible the fare structure and to encourage the flow of needed capital into the transit industry while using the tax measure to eliminate the possibilities of unreasonable returns on small capital investments."

Transit operators were urged to maintain modern equipment, to "merchandise" transit particularly during off-peak hours, and to acquaint the public with their problems.

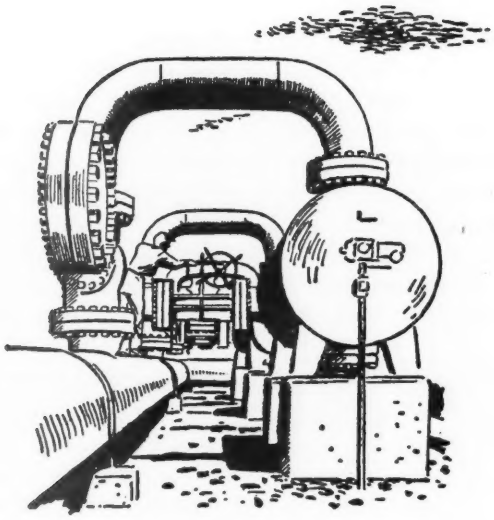
In discussing regulation of transit fares, the commission held that the "rate of return" theory of rate making is not practical. The operating ratio is being given more and more weight as a yardstick, it stated, although this method must have certain safeguards, and in order to promote its use as a basis for fares there must be a change in tax methods.

Regarding fare increases, the report pointed out that one difficulty has been the tendency to increase adult fares while leaving schoolchildren's fares practically undisturbed. However, the necessity for increasing children's and students' fares would be lessened if school authorities could eliminate children's riding during peak hours.

REGARDING criticisms made by the public, that (1) higher fares are mainly responsible for the decrease in traffic, and that (2) riders would be attracted by more frequent service and better seating, the report cited the experience of transit companies in New Orleans and St. Louis which show that these popular arguments should not be given too much weight.

Both the New York and Wisconsin commission reports are valuable contributions toward solution of the industry's many problems. It is hoped that they will receive careful study by all policy makers, both in the industry and in municipal and legislative quarters.

¶ "THE *best assurance we can give that economic growth will continue is to remove the barriers and impediments most likely to prevent it. Chief among these barriers is the ball and chain of high and discriminatory tax rates.*"
—HARLEY L. LUTZ,
Professor emeritus of public finance, Princeton University.



Natural Gas Still Needs Explaining

The public has some strange ideas about its natural gas service and the utility operations behind it from the wellhead to the burner tip. Perhaps out of the current discussion and controversy natural gas as a public service will come to be better understood by the great public which has so much stake in its proper use, development, and regulation.

By JAMES H. COLLINS*

NEARLY everybody in California should understand natural gas. For the state has pioneered its conservation, collection, processing, and underground storage, and the long-distance pipelines through which it is now being marketed nationally.

Yet a recent depth survey of their customers, made for two California gas companies, disclosed a minority that does not understand. These companies have undertaken an educational program of public relations work and advertising, to explain what the new fuel takes.

This seems to be a fresh and fertile field for promotion as well as public education. It undoubtedly has possibilities for other utility companies which may face similar problems.

Far-reaching changes in equipment and investments have been involved in developing the natural gas industry over the years, and hauling the product to market. But many customers assume that the gas is truly "natural" in every sense, ready to be taken from the ground, piped to the customers, and used—virtually with-

*Professional writer, resident in Hollywood, California. For additional note, see "Pages with the Editors."

out cost to the company providing the service.

This rosy view of their business, held by some of their customers, led the Southern California and Southern Counties Gas companies to develop new approaches in their advertising and public relations, and they are now in their second year of telling the public some of the facts of life in present-day gas business.

THESE companies serve Los Angeles and thirteen southern California counties. For years, they have maintained excellent customer and public relations. From time to time these were checked for results, through surveys, and two years ago a particularly comprehensive survey, on advanced psychological lines, was commissioned to McCann-Erickson, Inc.

A representative sample of customers was selected, by communities, class of service, incomes, ages, and the like, and questioned at length on matters like their views of the companies, on service, rates, regulation, appliances, competing utilities, public *versus* private ownership—a thorough quizzing, by trained psychologists, to obtain a large mass of information, from which valuable policy conclusions could be drawn by management. The results were considered well worth the work involved, and are embodied in five volumes of reports.

Typical of the scientific method employed, the interviewed customer would be asked, "What picture does the name of your gas company bring into your mind?" The customer was not asked to form an opinion, but to tell what stream-of-consciousness brought up, as the "personality" of his gas company. The psychologists maintain that people have such "images" of concerns with whom they do business, and by probing into them, it is possible to disclose reasons for likes or dislikes that can be important to management.

For these gas companies, these customer "images" varied widely. But the majority were favorable, and when analyzed were an endorsement of company policies, management, and past public relations work.

OUTSTANDING among the reasons for favorable opinions was the customer service given to assure good results in the use of the fuel. Service trucks answer emergency calls when appliances fail, and on longer appointments make inspections and adjustments of gas equipment in customers' homes, with suggestions for replacement where newer appliances will give better service.

"We had a leak here," a customer would say, "and the company had a serviceman on the job in thirty minutes, and a holiday too, and a very obliging, pleasant fellow. We think of the gas company as right up on its toes to serve its customers."

Next in making friends for the companies was a very different feature in their public relations, a two-hour evening concert of classical music records that has been given six nights a week for nearly fifteen years over KFAC radio station, Los Angeles. Customers spoke of listening regularly; about the high quality of the music; the good taste of the commercials; the pleasant personality of Tom Cassidy, the announcer; the commercial time given to promoting symphony and Hollywood Bowl concerts and other musical events. Freedom from "high-pressure" in these concerts and company advertising was frequently commended.

"What do I think of the gas company?" one customer answered; "I think the gas company is a gentleman!"

Still another factor in friendly feeling was that toward employees, particularly sales people. These companies do not sell appliances, but rely on a strong appliance dealer organization to make the sales stimulated by their advertising. They maintain appliance displays in showrooms at branch offices, and demonstrate appliances to large numbers of visitors, but they are always referred to dealers of their own choosing.

Briefly, where customers had had contacts with the "gas company" through service or employees, their feeling was friendly by a large majority.

CRITICISM was apt to come out of abstract matters, like rates, regulation, ownership, and so on, where there was lack of information, and it was here that the misunderstanding of natural gas emerged.

"Natural gas is a gift of nature," the critics said. "It comes out of the ground ready to burn. The state grants the gas company a monopoly in it. The gas company is a corporation, big, charges what it pleases. There is nothing I can do about it."

"Ha — — gas!" said a lunch guest, getting acquainted with his neighbor, a gas company executive. "I could drill a well right here in Los Angeles and tap enough gas to supply the whole state—it's underneath the city everywhere."

"Our people would be glad to hear about such a supply," said the gas executive. "If it were available we wouldn't need our forty-two and one-half million-dollar pipeline to New Mexico and Texas. May I ask what is your business?"

It turned out that this was an attorney, generally well-informed about business lines in which he practiced, but with these misunderstandings about natural gas, which were later found in the depth survey.

"Maybe we haven't told the public about the changes and costs that come to our business," reflected the gas company executive.

This was the attitude taken as a result of the survey, which inspired the informative campaign now in progress, and there was an amusing sequel to the incident, when the two lunch guests met again.

"You know, I've been reading some of your ads about your pipeline," said the attorney, "and last week I motored past that compressor station out in the desert. Often passed it before, but never knew that it was yours; always thought it was part of the Colorado river aqueduct!"

¶ "SINCE *war's end the nation has been using more and more natural gas. The customers have been told about the big pipelines, the enormous reserves of this fuel, its simplicity and superiority, the only utility product ready to use as it comes out of the ground. But . . . some customers take a startlingly different view of this simplicity, and need wider and better information. Other public relations problems are certain to arise in so dynamic an industry.*"

Beginning last year, a portion of the companies' advertising and public relations work has been directed toward informing the public about the different and costly technology of a natural gas utility.

GIVEN a billion cubic feet of natural gas in Texas, some of the customers apparently think that it has merely to be put in a pipeline and allowed to flow to their kitchens, to be turned on and off as wanted. What actually has to be done to natural gas before it will boil an egg is an engineer's story, abounding in technicalities and big equipment—and very little of which can be photographed or dramatized.

Coming out of the ground, from thousands of oil and gas wells, natural gas has to be processed before it starts for California. It contains impurities as well as by-products, and the natural gas company has absorption and purification plants for the purpose.

Far from just flowing along like "Ol' Man River," the pipeline journey offers an impressive railroad job. It starts out at 800 pounds' pressure, comparable to high steam pressure, and must be boosted every thirty or forty miles to the Colorado river on the California border, where delivery is taken by the California utility companies.

In railroad terms, calculated by the power required for one billion cubic feet, this is equivalent to a freight train 23 miles long, as the advertising writers have spotlighted it. It is about one day's present average retail supply for southern California, which last year burned around 344 billion cubic feet.

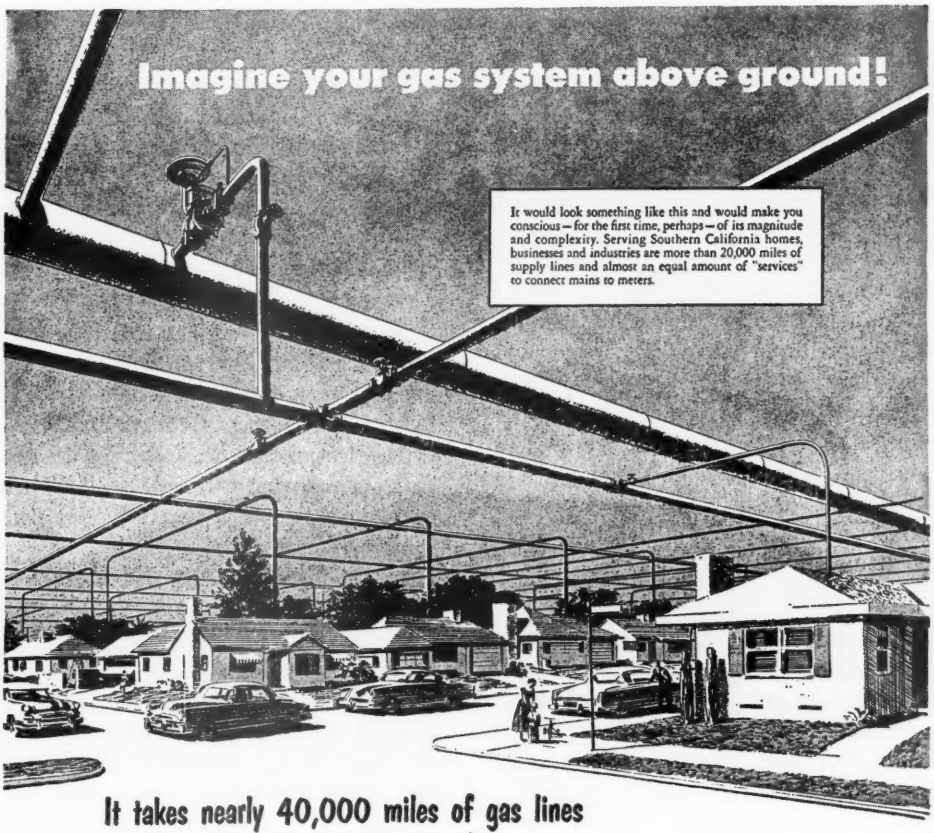
Apart from the compressor stations, everything is out of sight, underground, until the Colorado river aerial bridge is reached. There the pipeline comes into view, and offers the advertising writer a theme.

"Gas to Cook Tomorrow's Breakfasts Just Went through Here!" was the subject of one ad, showing the 1,020-foot crossing. The San Francisco area is now receiving Texas gas over a similar bridge, further north, and the Pacific Northwest will eventually receive Texas gas via pipeline.

THE Southern California companies maintain compressor and cleaning plants for their own distribution, beginning with a $6,134,000 compressor at Blythe, and two other large stations at Desert Center and Cactus City.

"Gas Comes to Town with a Clean Face" pictures one of the $50,000 scrubbing plants needed to clean and dry the fuel, and "Grand Central Station for Gas" shows the dispatching equipment needed to regulate the supply to different localities, according to requirements. Strict schedules are necessary over the large territory served by the two companies, with fluctuations in hour-by-hour consumption, and day-by-day temperatures; also, gas is drawn from California fields as well as the distant pipeline, and from capacious underground storages.

"Ever See an $8,000 Valve?" is a theme out of the distribution equipment, in which one of the big valves required at important control points is shown. Such a valve costs about as much as three new automobiles. To date, the system has 76 of them, some operated by remote control from points as far as 100 miles away. Countless smaller valves in sizes that cost less than a dollar are needed, and pictures of such



Sample from advertising series, Southern California Gas Company

equipment are enlightening to the customer, who all along has thought that natural gas is simple stuff—you just turn it on and boil your egg.

One of the most striking advertisements last year was, "Imagine Your Gas System above Ground." It shows a residence neighborhood rife with the usual activities, fathers mowing lawns, mothers motoring to market, kids at play—all as usual.

But the gas pipes are all in the air, symbolizing underground plant totaling 20,000 miles of mains, and that mileage of house connections. It was an idea, it threw a little fantasy into familiar things, it struck popular fancy.

THIS advertising is strongly institutional, and that is a word of reproach with many advertising men, who maintain that the purpose of advertising is to sell goods, not to dilate upon the size of your company, the marvels of your plant.

But this institutional advertising sells gas and appliances.

"Despite the hundreds of millions of dollars invested in equipment to bring ample supplies of natural gas to southern California," is stated in every ad, "gas rates here are below national averages for household service."

This statement is supported by household comparisons.

"Year-round average monthly gas bills in this territory, for cooking, water and house heating, are below $5, comparable with a daily loaf of bread or a quart of milk." Diagrams of a penny are used to illustrate such household values as, "On the average, one cent's worth of gas will broil two thick steaks, or heat the water for eleven shaves," and so on.

At the outset the slogan "Natural Gas Is Cheap in Southern California" was prominent in each ad, but found to have undesirable implications. Even when things are really cheap, it seems to be American psychology to soft-pedal a bargain. But the same point is stressed with better phrases: "Gas costs little," and "Your household bargain is gas," and "Live better, spend less with gas." The sales psychology is sound, and many customers from other parts of the United States, new arrivals in the region, testified to the more moderate gas rates.

Appliances are strongly promoted as another commercial feature of this advertising. "Gas serves best in up-to-date automatic appliances" is a constant theme. Thumbnail line cuts show the latest ranges, water heaters, refrigerators, clothes driers, disposal units, and space heaters, and the public is invited to see the late models at appliance dealers' showrooms, or at the exhibits constantly maintained at company offices.

Another picturable angle of natural gas service is underground storage in reservoirs and pipelines.

Southern Californians of today have forgotten, or never knew, the sudden peak demands of prewar days, typical of which was the cold spell of January, 1937, which froze oranges on the trees, and drew upon gas reserves for 450,000,000 cubic feet the following day, at that time a record. Industrial customers were cut off to keep homes warm, and new storage holders built against the next cold spell. These peak days are unpredictable, and soon over, but they do take gas!

War industries intensified this problem, because their work had to go on, and in 1941 the companies developed a partially depleted gas field, at Goleta, near Santa Barbara, as their first underground reservoir. It was tight and provided a seasonal withdrawal rate of twelve billion cubic feet capacity. It was slowly filled with natural gas from California fields, and amply safeguarded demands through the war years. Since then, two other underground pools have been acquired, at Del Rey and East Whittier; that at Del Rey is owned by the Southern California Gas Company, and the Goleta and East Whittier fields by the Pacific Lighting Gas Supply Company, an associated company serving the two distributing companies.

Motoring past one of these reservoirs, one sees chiefly a "Christmas tree" of valves, and probably takes it for a remote control installation of the oil industry. But down below, out of sight, will be enough reserve gas to fill thousands of surface holders. From its infancy the familiar

"gas tank" has been the symbol of the gas industry. But underground reservoirs are the present-day holders, which, while still utilized in the far-flung distribution system of these companies, are less and less in evidence. Surface storage for the present reserves would require a regular "gas tank" subdivision. With the help of underground storage, 1,675,000,000 cubic feet were sent out on the coldest day in 1954.

FURTHER underground storage is provided in the 30-inch pipelines which are standard for the system. This is six inches larger than the famed "Big Inch." The first Texas line, 26-inch, in 1948, had 305,000,000 cubic feet capacity. The 30-inch system today has 705,000,000 cubic feet capacity.

These storage facilities are a feature of the present-day gas business hardly known to its customers, and not capable of picture treatment. And they are typical of the way gas has dropped out of sight, with the change from manufactured to natural fuel.

People in southern California have little difficulty in realizing population and industrial growth, as a consequence of war. One bumper-to-bumper jam on a freeway brings it home.

But the corresponding growth of the gas service has been largely out of sight, in statistics that are being dramatized to good purpose, for popular understanding.

In 1940, these companies had 968,954 customers (independent active meters); and yearly sales (retail only) of 101,854,000,000 cubic feet.

At the end of 1954 they had 1,933,050 customers, and retail sales for the year totaled 343,490,656,000 cubic feet.

Without the vast extensions of plant, in new types of equipment, the gas resources of California would have been inadequate.

THIS consumer survey is probably the most comprehensive yet made by a company of the gas industry, and points to new areas of public relations work.

For example, the psychologists know that the "personality" of a utility company is in strong contrast to that of an automobile company. The owner of a new automobile paid more for it than the one he traded in, but it is bigger, more powerful, has more of what it takes to keep up with the Joneses; he is proud of showing that he can afford it.

But the utility company is a chore boy. The customers are not necessarily proud of the size of a gas bill. As one housewife put it, "I guess the gas bills are reasonable, but what with many other expenses we are kept poor."

Since war's end the nation has been using more and more natural gas. The customers have been told about the big pipelines, the enormous reserves of this fuel, its simplicity and superiority, the only utility product ready to use as it comes out of the ground. But the California survey shows that some customers take a startlingly different view of this simplicity, and need wider and better information.

Other public relations problems are certain to arise in so dynamic an industry.

Understanding customers will be needed as problems develop.

Should Public Utility Commissioners Be Elected or Appointed?

PART II.

This is the second of a 2-part series of articles based on a careful examination of the arguments pro and con and the relative performance of the appointed and elected commissions. In this instalment the author considers how problems common to both the elected and appointed commissions are handled by the two systems. He also gives some balanced conclusions on the respective merits of the two forms of selecting public utility commissioners.

BY LINCOLN SMITH*

THE purpose of this article is to explore problems common to both elected and appointed state public utility commissions, and to consider additional differences which presumably emerge between the two systems for recruiting top personnel. This will include a discussion of some concrete case studies. Finally, attention will be devoted to the professional opinions of several authorities on the subject. The views of practitioners in the field vary. It is only natural to expect commissioners who obtained their posts by election to be staunch supporters of that system; likewise, men who were appointed to office will, *ipso facto*, favor the method by which they were chosen. Inasmuch as both sympathy for, and loyalty to, the respective commissions and the sum and substance of the constitutional and/or legislative mandates under which they operate are basic requisites for any commissioner, it is doubtful to what extent, if any, the holder of a commissionership could openly agitate for a fundamental change in the institution he is under oath to serve and foster.[1] On the other hand, the conclusions of academic

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men are ever vulnerable to a charge of dogmatism and a stigma based upon the gap between theory and practice.

Part I of this article in the April 28, 1955, issue of the FORTNIGHTLY analyzed the fundamental tenets on which the philosophy of elected and appointed commissioners rests. It indicated that the configuration for an elective commission is that its basic task is quasi-legislative, and that its major responsibility is to the consumers of utility services. Thus, a commissioner, like a legislator, should be popularly elected. The opposing belief is that a public utility commission is engaged in public administration, and that both legislative and executive relationships are within its frame of reference. The chief executive is charged with the obligation of taking the initiative in the selection of commissioners in order that he may impart a political sense of direction to the commission and mesh its over-all policies with his administrative program. Both views are entitled to respect, because each contains a certain amount of logic.

The first part of this study suggested that the case for elected commissions depends somewhat upon the interest voters take in their public utility commissions, and the degree of statesmanship political leaders are willing to show. At the same time it was stated that the appointment system depends upon the human strengths and weaknesses of the particular governor. Its validity rests upon the presumption that the chief executive will nominate in the public interest and not for his own political advancement.

ADDITIONAL data on commissions chosen by each system reveal paradoxes and some vicious circles in cause-and-effect relationships which defy formulæ and which refuse to crystallize into logical conclusions. There are risks to be taken under whatever method is used—risks which seldom can be calculated. Perhaps the best yardstick for evaluating an existing system is whether it produces general satisfaction in its particular jurisdiction. Some grumbling is to be expected, but if it is on the fringe or comes from varied sources, the regulation may be fairly well equilibrized. Thus, the rôle of pressure groups is a relevant factor. Equally important, but likewise impossible to state in syllogistic form, are the relations between commissions and courts.

ELECTIVE commissioners may be inclined towards oversimplification and platitudes, in their advocacy of the public's cause and to promote their own re-election. But such a commission also has staff members who are not under constant electorial pressure—unless the staff also happens to include strictly political appointees not under a merit system. On the other hand, appointive commissioners who are responsible to a chief executive, and often less directly to a portion of the legislature, are likely to find among their political supervisors a few influential men who are rather well versed in utility law and economics.

The legislative committee on public utilities and the committees on judiciary and legal affairs, for example, usually contain some lawyers who are familiar with regulatory problems. These men would be less impressed with sophistries than with logical and constructive (but less spectacular) public regulation in the interests of all parties. In short, sound regulation requires reasonable administration. There is

no basis for emotional appeals on a quasi-judicial tribunal. One cannot conclude that in practice either the election or appointment of commissioners actually promotes a maximum of regulatory profundity. Nevertheless, one inherent incentive for elected commissioners to make good with the public is to attune regulatory philosophy to the level of the rank and file. Appointed commissioners, in order to justify their continuance on the job, are induced to maintain a quality of work which will appeal to a somewhat more specialized and better trained group of political leaders who occupy strategic positions on the regulatory periphery. Of course, this hypothesis does not hold in the cases of independent commissioners who are motivated altruistically to do an equitable job without regard to endorsement of their records for another term on the commission.

ANOTHER observation is that certain commissioners, regardless of how they gained office, are political leaders engaged in active promotion of themselves. Membership on a commission is often a springboard to higher public office. Many commissioners have become governors, others high court justices, and some have gone up to federal commissionerships. This is not to suggest that these all served on the commissions with only an eye to political advancement. But elected commissioners can build and mend their political fences among the voters. Their relations with governors and party leaders may be only incidental. Appointed commissioners are likely to be oriented more toward the political party leaders. They are in a position to prove that they are assets to the administration. Fortunately, a great majority of commissioners are preoccupied with the professional duties of their office. But those who are interested primarily in political ascendancy may be tempted to procrastinate or even neglect their professional duties, throwing the burden on colleagues and staff.

THE influence of organized pressure groups on any commission is conjectural and is not subject to precise analysis. Lobbying is recognized as a part of the American political process, and each interest is entitled to state its case legitimately before regulatory agencies. Inasmuch as countergroups of interests often present the other side of the argument, too, the influence of organized pressures probably has been overemphasized in recent years. Any attempt to obtain an answer, boldly or cautiously, to a hypothetical question on this subject from either elected or appointed commissioners is hardly likely

¶ "A COMMISSIONER *who can be recalled under certain circumstances is ever conscious of his public responsibilities under the threat of removal for neglect. He may also be amenable to reasonable suggestions from the chief executive, who is responsible for procuring harmony and co-operation throughout the administrative structure. Contrariwise, a conscientious commissioner could become frustrated if a domineering chief executive tries to 'take over' the decision making.*"

to shed much light on the true situation. Only when particular interests dominate a commission does this subject receive open and serious attention. Even then, what appears to be clear domination might be honest conviction on the part of the commissioners. The two could be coincidental.

It cannot be proved that elected commissioners are better friends to the public than appointed ones, even though some evidence does point in that direction. When a governor wins an election on an anticorporation plank, he is likely to nominate commissioners with similar reform leanings. Hence, predominantly public-minded commissioners can and do exist under both plans. But the converse is also true. Since one governor cannot very often name all the members of an appointed commission, in view of the staggered terms of the members, and because the nominations frequently require confirmation by a sector of the legislature, any particular governor (unless re-elected for several terms and unless he provides strong and well-accepted leadership for the lawmakers) can seldom dictate a majority of the commissioners.

REGULATED companies, especially since the era of the roaring twenties, can no longer influence the electorate sufficiently to procure the mass election of their commissioner candidates. Their ability to bring a governor around to their way of thinking, or to show him how to be "reasonable," may be possible on occasion. The chance is probably a slim one. Nevertheless, in theory, appointive commissioners could be more amenable to corporate interests than those responsible to the electors. This corollary is also true—appointed members may be more impartial in the performance of their official duties than commissioners who are elected on the promise to be almost exclusively public minded.

Whether a commissioner should have virtually secure tenure during his term of office or be subject to removal for specific causes presents a debatable problem of cause-and-effect relationships. Under the former alternative (which the election of commissioners fosters) a commissioner is naturally more independent. Under the latter (which is engendered by the appointment process) he is subject to pressure from his superiors, whether exercised or not. An independent commissioner might well turn out to be an irresponsible commissioner who might neglect his official duties, or perform them so aggressively that ultimate responsibility would rest with the courts. That is not the way regulation is supposed to work. On the other hand, he could exercise his own judgment and be immune to pressure group tactics.

A COMMISSIONER who can be recalled under certain circumstances is ever conscious of his public responsibilities under the threat of removal for neglect. He may also be amenable to reasonable suggestions from the chief executive, who is responsible for procuring harmony and co-operation throughout the administrative structure. Contrariwise, a conscientious commissioner could become frustrated if a domineering chief executive tries to "take over" the decision making. While neither probability is clear-cut, each is recognized in New Mexico. The elected commissioners are subject to recall only under a cumbersome constitutional provision.[2] The appointive commissioners are subject to removal for specific cause, after hearing, by the governor.[3]

Good Trees Bring Forth Good Fruits

"It is probably not entirely coincidental that the states which enjoy the highest professional prestige in the philosophy and practice of regulation have appointed commissioners—New York, Wisconsin, California, Pennsylvania, Ohio, and Connecticut, just to mention a half-dozen. This is not attributable solely to the individual commissioners. And, to repeat, it does not mean that election states have not produced time and again extremely able men. Yet it is a fact that several states which elect commissioners do not enjoy very impressive reputations in the field of regulation."

ATTEMPTS to compare the effectiveness of any two commissions are of only relative value, because—to cite just a few variables — their legislative mandates, available funds, and judicial context not only differ but also fluctuate over the years. Even in New Mexico and Kentucky, states which support two or more commissions, one of which is elected in each state and the others appointed, the respective commissions operate in different settings. At the risk of oversimplification, it might be said that the older constitutional agencies are generally given more limited jurisdiction than the flexible statutory commissions. And since the tribunals established by the constitutions are more or less independent of the executive establishment, they operate at a disadvantage as compared with the statutory commissions in that the latter are in a better position to obtain funds.

Inasmuch as the governor has some responsibility for statutory commissions, they can receive more friendly consideration from an executive budget, whereas the

independent constitutional agencies have nobody to intercede for them and they are dependent for financial support on a chief executive to whom they are not responsible and to a legislature which did not create the body or prescribe its directives. It is significant to note at this point in the analysis that in New Mexico and Kentucky, constitutional commissioners are elective, and that statutory commissioners and appointive commissioners are synonymous. Hence, in some cases constitutional commissions actually operate in the weaker setting, and much of their effectiveness is due largely to the ability, diligence, and efficient performance of individual commissioners.

In view of the above limitations, comparisons of the respective commissions must be made cautiously and with certain misgivings. An incisive study by Professor Henry Weihofen of the University of New Mexico Law School on the situation in that state reported that

> Almost without exception, commissioners have come to their positions—both on the corporation commission and the public service commission—without any prior training or experience qualifying them for the position. This has been particularly true of the corporation commission, whose members are elected and who therefore come to this position by the same fortunes of politics as control the fate of other elective offices. . . .
>
> Even the amount of learning that an inexperienced commissioner could do during the time he is likely to be in office is typically not had in this state, because he is usually more interested in keeping up his political connections than in studying utility problems and commission administration. This is definitely more true in the corporation commission than in the public service commission, but it is also true in the appointive agency in other states as well as ours. A man who looks upon his election to the corporation commission as a steppingstone to bigger things is more likely to be interested in the political possibilities of the office than in tending to the problems of regulation.[4]

Professor Weihofen concluded that "the consensus seems to be that the public service commission has been doing the more efficient job, and the trend in other states is in favor of the appointive and away from the elective commission."[5] His observations were corroborated by a leading newspaper, which concluded editorially in relation to the two commissions that the difference is that the (elected) corporation commission offices usually are filled either by politicians or persons who are not too well versed in public utility matters, while to some degree the public service commission posts have been filled by appointment of members who have experience in, or knowledge of, the subjects with which they are required to deal.[6]

The same newspaper later took the view editorially that "The [elective] corporation commission has shown more disposition to fight those constant rate increases than the administration-appointed board [public service commission] and to bring the problems out before the people."[7] Strong evidence that the popularly elected body has succeeded in creating a public awareness of the importance of regulatory policies there and that commissioners are considered major public officials is seen

in the fact that, in the 1954 elections, the chairman of the corporation commission led his ticket. In the largest vote percentagewise ever cast in that state, Commissioner Pickett was re-elected by the greatest majority of votes since statehood—a tribute not only to a colorful personality but also to the endorsement of his record on the commission.

THE situation in Kentucky awaits careful and deliberate examination.[8] The writer has received several more or less conflicting opinions and impressions. The fact that members of the railroad commission serve only part time, that their salaries are the same as when the agency was first established in 1876, and that the powers have been curtailed further complicates attempts at objective commentary. The weight of evidence seems to indicate that the elected railroad commission is more ostensibly consumer conscious, and that the two appointive statutory commissions are inclined to give more attention to court precedent. It appears that the appointive public utility commission was for part of its history oriented more or less toward regulated business, and for a longer period toward the consumer. At times the elected commission has been under political stress. All this, of course, is still somewhat hypothetical; all litigants are given fair hearings before any of the commissions. It is clear that the elective system has not promoted party conflict on the railroad commission. Even though the member from eastern Kentucky is usually a Republican and the other two commissioners are generally Democrats, this has had no noticeable effect on the teamwork of the agency.

OREGON earlier this year considered, but finally rejected, a change from an appointive to an elective commissioner.[9] State Senator Monroe Sweetland, at a hearing on the bill he introduced, argued that consumers would be better protected from "influence of well-organized utility monopolies" with an elected public utilities commissioner, rather than with one appointed by the governor.[10] This move was significant because in 1931 Oregon made the formerly elective office an appointive one.

It was an outgrowth of the battle between public and private power groups which is being waged sharply in the Pacific Northwest, a controversy which is inevitably replete with emotional preconceptions rather than logic on both sides. Po-

¶ "THE *quasi-judicial functions of regulatory agencies are a relatively minor part of their tasks, such as ordering refunds or other duties which look to the adjudication of events in the past. Rate making, the most important rôle, is always for the future and has generally been regarded as legislative in character. Setting up service regulations, safety standards, compiling reports and accounts are, of course, administrative functions. The commission is thus typically a trinity of governmental power, partaking of some of the characteristics of each of the three branches, but exclusively belonging to none.*"

litical party lines were rather rigid on the issue at the time.

Here is part of the opinion of Senator Sweetland:

> Oregon has had [since 1931] a series of commissioners who, in the opinion of the Oregon State Grange, the State Federation of Labor, the Farmer's Union, and the CIO, as well as many community organizations, have been exceedingly tender of the interests of the private utilities they are supposed to regulate. Oregon has had a series of Republican governors (Secretary of the Interior Douglas McKay appointed the present commissioner when he was governor) who have been exceedingly friendly to the private power companies, as well as other private utilities, and they have by the same token been hostile to our public power agencies throughout the state. . . . This bill will not, in my opinion, be able to pass the Oregon state senate where the proprivate power groups predominate. However, if we decide to take this issue to the people by initiative, most observers have little doubt that the people will make the office elective.[11]

THE rebuttal has been given many times.[12] Power companies have legal rights which cannot be impaired. The business-managed industries do not deserve the discriminatory treatment their foes would like to impose. Public power is usually not cheaper when public subsidies are equitably computed—actually it sets up a "favored class" at the expense of taxpayers. Private initiative as opposed to socialization of industry is a main tenet of American economic life. No matter how impartial it may be (though few commissioners can be neutral on this issue), a commission which tries to lay the foundations and regulate two computing ideologies will please neither.

The issue in Oregon, in 1931 and again in 1955, raises an important philosophical question in free government: How far and to what extent can a dissatisfied vested interest press for fundamental alteration of organic acts and existing political institutions in order to achieve a preconceived result?

Above all, the controversy in Oregon underlined a common but not always valid opinion that elected commissions and consumers' interests are synonymous. Real consumer interest might well be damaged by a commission more interested in mass applause than in decisions which will stand up on court appeal.

BEFORE considering commission-court relations, a word of caution needs to be injected about glib comparisons between courts and commissions. Most of the arguments for the election or appointment of judges have little validity in relation to commissioners. Aside from the fact that the pulse of democracy must be felt in the top staffing of courts and commissions, the analogy between the two is incorrectly developed. The orthodox functions of courts and commissions differ decidedly. The courts belong in one of the three separate branches of our government, the judiciary. It is difficult to place the commissions in a single category. In some states they are amenable to legislative control, in others they are under executive sway, and in other jurisdictions they occupy the status and rôle of administrative agencies, which repudiates Montesquieu's separation of powers.

The Bench and the Platform

". . . sound regulation requires reasonable administration. There is no basis for emotional appeals on a quasi-judicial tribunal. One cannot conclude that in practice either the election or appointment of commissioners actually promotes a maximum of regulatory profundity. Nevertheless, one inherent incentive for elected commissioners to make good with the public is to attune regulatory philosophy to the level of the rank and file. Appointed commissioners, in order to justify their continuance on the job, are induced to maintain a quality of work which will appeal to a somewhat more specialized and better trained group of political leaders who occupy strategic positions on the regulatory periphery."

The quasi-judicial functions of regulatory agencies are a relatively minor part of their tasks, such as ordering refunds or other duties which look to the adjudication of events in the past. Rate making, the most important rôle, is always for the future and has generally been regarded as legislative in character. Setting up service regulations, safety standards, compiling reports and accounts are, of course, administrative functions. The commission is thus typically a trinity of governmental power, partaking of some of the characteristics of each of the three branches, but exclusively belonging to none.

BECAUSE of the elevated tradition of the legal profession and the great prestige of the American judiciary, the effectiveness of regulatory commissions sometimes has been evaluated in terms of the number of decrees sustained and overruled by appellate review. Of course this quantification is not reliable. At best it transfers the higher reputation of the courts to the less revered administrative commissions when their opinions coincide. Although this yardstick often does have the effect of indicating when commissioners have tried to take the law into their own hands in its administration, no means is afforded to in-

dicate if the commission order was correct in the first instance and whether the court erred in repudiating it. Nor is it a reliable test when a commission has a record that very few of its decisions have been challenged by the litigants in court. Such a record was construed to suggest the possibility of complaisance of a commission—that its conservative rate orders were generally acceptable to the industries regulated.[13] This contention overlooks the correlative possibilities of bona fide decisions. Companies may feel their cases are not strong enough to win appellate reversal or that it would be inexpedient to antagonize the regulatory agency. The adequacy of provisions for judicial review and company "public relations" are additional considerations which play a part.

NEVERTHELESS, commission-court relations shed some occasional light on how often judges think commissioners acted within their area of discretion. The nature of sustained and rejected administrative orders may mean the court was oriented in one direction and the commission in the opposite. A few concrete examples are available. In recent years very few decisions of the Kentucky Railroad Commission were taken to court. In each instance the ones that were decided favorably to the railroads were affirmed, and those that were decided against the railroads were overruled. Likewise, the public service commission of that state has fared well in its rulings when tested in the courts of Kentucky. Since the effective date of the organic act through January, 1954, only two orders of the New Mexico Public Service Commission out of 410 were taken to the district court. In both cases the commission was sustained.

PROFESSOR Fesler has wisely concluded that "Neither popular election nor gubernatorial appointment ensures the selection of competent utility commissioners."[14] An earlier treatise stated it this way:

> There is no doubt that too little attention has been paid to the qualifications of commissioners. Under the elective system qualifications of a technical or semitechnical nature necessarily play a secondary or an entirely subordinate rôle to vote-getting ability. Under the appointive method utility commissionerships are looked upon all too often as political plums.[15]

Another eminent authority, whose text has the distinction of having been cited by the United States Supreme Court, summarized the arguments against the election of commissioners:

> The men who are best qualified by training and experience to discharge the exacting duties of commissioners are unlikely to be suited by either ability or inclination to undertake political campaigns to win office; nor should the commissioner who is in office be under the necessity of interrupting his work to endure the fatigues and frustrations of a political campaign; and most important of all the members of the commission should be above politics, indifferent to the political aspects of the cases that come before them, and independent of the political favors and enmities of corporations and consumers alike. . . .[16]

The choice, to use loaded words, is between an elected "politician" and an appointed "bureaucrat." The fundamental question resolves itself into which system will result in a better selection of commissioners over the longer period of time.

This, in turn, depends upon complex human equations which vary as to time, place, and circumstances. An alert and intelligent electorate can, if and when it wants to, elect more competent officials than a politically ambitious chief executive whose major objective may be to promote his own political strength, without too much regard for the commonweal. But, alas, all electorates are not always alert. And, fortunately, governors often do put statesmanship first. Such an executive can focus attention on these appointments and nominate or select competent commissioners only after he has carefully canvassed the available field.

It is probably not entirely coincidental that the states which enjoy the highest professional prestige in the philosophy and practice of regulation have appointed commissioners—New York, Wisconsin, California, Pennsylvania, Ohio, and Connecticut, just to mention a half-dozen. This is not attributable solely to the individual commissioners. And, to repeat, it does not mean that election states have not produced time and again extremely able men. Yet it is a fact that several states which elect commissioners do not enjoy very impressive reputations in the field of regulations.

The "case" for elected commissioners seems strongest in the small states. Several of the larger ones adhere to it by choice. It is the writer's considered opinion that a net practical result of the appointment of commissioners is to enlist more able men and women, in the sense that they are more familiar with, and proficient in, the theory and practice of sound regulatory administration.

Footnotes

[1] It is recognized that commissioners may *recommend,* with propriety, to legislative authority changes in the substance of the law they consider desirable in the light of their experience on the commission. But that does not go so far as to *advocate* basic alterations in the commission itself.

[2] New Mexico Constitution, Art IV, § 36.

[3] New Mexico Public Service Commission Act, § 72-405.

[4] Report to the Committee for Study and Recommendation of Reorganization of the Executive Branch, State of New Mexico, on the corporation commission and the public service commission, by Henry Weihofen. Mimeo. (1952) pp. 62, 63.

[5] *Ibid.,* p. 70.

[6] Albuquerque *Journal,* February 24, 1953.

[7] *Ibid.,* December 16, 1953. Another bill proposing to consolidate the two commissions is under consideration this year.

[8] This has been undertaken by Dee Akers in a doctoral dissertation, "Procedures of Regulatory Administration in Kentucky" in the department of political science at the University of Kentucky.

[9] Oregon has a one-man commission.

[10] *The Oregonian,* January 29, 1955.

[11] Personal letter to the author, Salem, Oregon, February 16, 1955.

[12] See, for example, two articles by the author: "The Proposed Development Authority Compact for New England" in *Political Science Quarterly,* March, 1951; and "A New Regionalism in Regulatory Administration," PUBLIC UTILITIES FORTNIGHTLY, March 26, 1953, p. 427.

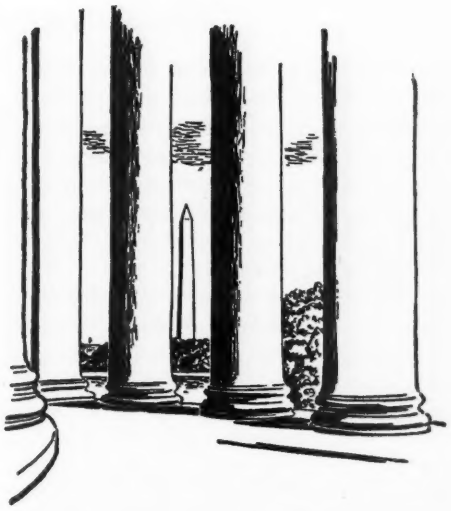
[13] "Connecticut court records indicate that since 1911 only four rate cases were appealed to the supreme court of errors by the companies. In the last ten years litigation in the courts affecting the commission has been practically nonexistent. Given the inadequate staff of the commission, its reliance on company data, and the preoccupation of the commission and staff with the formal aspects of regulation, the relative absence of appeals suggests the possibility that the commission has failed to hold rates to a reasonable return on the invested capital. That is, rate decisions have been so much above that long-established standard that the companies have never found it necessary to challenge the decisions." *Public Utilities Commission.* REGULATIVE AGENCIES. Report of Survey Unit #9 to the Commission on State Government Organization. Connecticut. By Marver H. Bernstein. November 21, 1949. Part II, p. 23.

[14] *The Independence of State Regulatory Agencies,* by James W. Fesler (Chicago, 1942), p. 22. Also, *Economics of Public Utilities,* by Emery Troxel (New York, 1947), pp. 79, 80.

[15] *Public Utility Regulation,* by William E. Mosher and Finla G. Crawford (New York, 1933), p. 8.

[16] *The Economics of Public Utility Regulation,* by Irston R. Barnes (New York, 1942), p. 178.

Washington and the Utilities



Gas Consumers Protest

THE effort made by Representative Priest (Democrat, Tennessee), chairman of the House Interstate Commerce Committee, to wind up hearings on the Harris-Hinshaw bills by April 29th was viewed in some quarters as an effort to cut off growing opposition from so-called consumer groups. Following the Easter recess, the committee has been hearing a parade of witnesses representing varied interests and with widely differing views on whether independent producers of gas should be fully exempt from FPC regulation, as provided by the Harris-Hinshaw bills.

First there was the position taken by the gas distributing utilities. Randall Le Boeuf, New York attorney who appeared for a group of the distributors, agreed to the exemption of producers from FPC controls only under conditions which neither the producers nor the pipeline companies would be likely to concede without considerable argument.

The principal target of the distributors was the operation of escalation clauses and most favored-nation clauses in contracts between producers and pipeline companies. On the whole, the gas distributing utilities were generally inclined to agree to some limited form of relief for producers from the rigors of full FPC jurisdiction. But none favored full exemption offered in the proposed legislation. All were hostile to unsupervised escalation clauses in producer pipeline contracts. Testimony ranged from the mild approach taken by a witness for the United Gas Improvement Company in favor of bills to exempt small producers from all regulation, to that of counsel for the Minneapolis Gas Company, who advocated strict regulation of all producers on an original cost basis.

Under the recommendation of counsel for most of the distributing companies appearing, FPC would retain a qualified sort of jurisdiction over all producers. FPC would be required to exercise control over contracts (1) where the "more injurious forms of escalation clauses" were in operation, and (2) where FPC, a state commission, a pipeline, or a distributing company could show that a contract was not made at arm's length.

ON the other hand, witnesses for coal mine operators and their labor unions

took the position that the FPC should exercise more, not less, jurisdiction, especially over direct sales for industrial use. Such direct sales, the coal industry witnesses claimed, amount to little more than off-peak or dump price sales below actual cost or the comparative level of rates charged to distributing utilities. The use of such direct sales to keep pipelines operating during off season periods results in the employment of natural gas for boiler fuel and otherwise adversely affects the market of the coal industry.

SPOKESMEN for the National Coal Association, who said they speak also for the Anthracite Coal Institute, testified before the House Commerce Committee in support of a bill by Representative Staggers (Democrat, West Virginia). The bill would require federal regulation of direct industrial sales of gas and would specify that the charges for these industrial sales could not be below actual cost plus a fair proportion of fixed charges.

Rolla D. Campbell, general counsel of the Island Creek Coal Company and main spokesman for the coal association, warned that "we will oppose any legislation to remove Federal Power Commission controls over the production and gathering of natural gas unless such legislation is broadened to include the principal features of the Staggers Bill."

Robert E. Lee Hall, general counsel of the National Coal Association, said Congress has exempted direct industrial sales of gas from federal rate regulation on the assumption that state commissions would regulate the sales. However, he said, state commissions have taken the position that these sales are really part of interstate commerce and not subject to their control. As a result, there is no regulation at all on these industrial sales, he declared.

MR. CAMPBELL said the coal industry has suffered heavily during recent years from wholesale invasion of its markets by natural gas. It naturally resents such a loss of markets, he continued, but it especially resents a loss of markets "under circumstances where the competitive factors are not relatively equal." This is the case, he told the committee, where pipeline companies sell gas to large industrial consumers at "dump prices." He continued:

> We call them dump prices because they are only a fraction of the prices at which the same gas is sold to the local gas companies for resale, and bear no relation to cost. As you know, the FPC cannot regulate the prices at which gas is sold by pipelines to purchasers who consume the gas and do not resell it. But in fixing the rates on regulated sales, it permits the pipeline companies to charge most of the fixed costs against the regulated sales and thereby to reduce the costs charged against unregulated sales.
>
> The coal industry feels it has every right to call this practice unfair competition resulting directly not from the free play of competitive forces but from the terms of an act of Congress.

IN addition to the distributing utilities and the coal industry, the mayors, governors, and other consumer witnesses rallied by the National Institute of Municipal Law Officers were expected to make the most political impact on the Congressmen. However, not all of the developments were unfavorable to the Harris-Hinshaw legislation, even during the presentation of the case for the opposition. Support within the committee from so-called consumer state Congressmen made a very definite appearance.

Two Congressmen from consumer states, Representatives Hale (Republican,

Maine) and Dolliver (Republican, Iowa), appeared to back the Harris-Hinshaw proposals, if some consumer protection against unreasonable escalation could be added. Hale particularly asked for clarifying legislation during cross-examination of distributor witnesses, as he sharply disagreed with those who supported the status quo, calling the U. S. Supreme Court's decision in the Phillips Petroleum Company Case a "weasely" opinion.

What reception producer forces will hold out to such qualified support remains to be demonstrated. But even if not required by the committee breakdown on the issue, some changes may occur.

Uncle Sam—Big Businessman

THE first general report of an inventory of federal business, real estate, and other property holdings has been made by the General Services Administration. The report, which was made at the request of the Senate Appropriations Committee, covers government land holdings, structures, and facilities owned, operated, or maintained by the federal government. In brief, it shows that Uncle Sam, in addition to owning 21.3 per cent of the area of the continental United States, owns (1) gas lines; (2) electric power systems; (3) railroads; (4) telephone lines; and (5) breakwaters, docks, and jetties—all purchased and operated or maintained with tax funds. All federal property, exclusive of "trust" properties and the public domain, was purchased at $30.2 billion.

The inventory covers all real property owned or acquired up to December, 1953. Additions are likely. The GSA states that no report of this magnitude has ever been attempted and some inaccuracies have undoubtedly crept into its compilation. Refinements are to be made.

The government owns $14.4 billion in buildings and $13.6 billion in "structures and facilities," according to the report. Interior, the Atomic Energy Commission, GSA, and the Tennessee Valley Authority, in that order, trail only the Defense Department (all military installations) in the cost of real property under their respective agencies. Defense, $18.8 billion; Interior, $3,260,000,000; AEC, $1,840,000,000; GSA, $1.3 billion; TVA, $1,150,000,000. In contrast, the Post Office Department's 3,000-odd local post offices, a poor ninth, aggregate $468,000,000. Third place in the "cost-of-federal-land-by-predominant usage" goes to "power development" ($245,000,000). First and second place are held by "flood control and navigation" and "military," respectively.

THE cost-of-federal-structures-and-facilities list is headed by "power development," with a federal expenditure totaling $2,701,000,000. An additional category cited as "electrical distribution systems" accounts for a federal expenditure of $1,017,000,000. Water systems, $817,000,000; heating systems, $664,100,000; and communications systems (including telephone, telegraph, and microwave), $206,300,000. Under the power development heading the cost of facilities is broken down further to three agencies: Interior, $947,000,000; TVA, $927,000,000; Army Engineers, $827,000,000. These figures include hydro projects, appurtenant facilities, and transmission lines.

Lesser utility systems (heating, water, and communications) are broken down as follows: Defense, $1,616,000,000; AEC, $216,000,000; housing, $99,000,000; others, $187,000,000. Electrical distribution credited to Defense, Interior, and AEC refers to systems which are owned by the federal government, but which distribute electricity purchased from other federal agencies or private producers.

Wire and Wireless Communication

FCC Examiner Disapproves Bell System Acquisition

SOUTHWESTERN BELL TELEPHONE COMPANY'S petition to acquire an independent telephone company property at Tomball, Texas, has been turned down in an initial decision by FCC Examiner H. Gifford Irion. The decision, which becomes final unless altered or reversed by the full commission, denies the Bell system company's application for a certificate to purchase, for $200,000, properties of the Tomball Telephone Company, located outside Houston, Texas. The small independent has an estimated net investment of $96,900.

Irion's decision pointed out that such a certificate provides exemption from antitrust laws and therefore imposes a burden of proof of public interest on the applicant Bell system company, which it failed to sustain. Southwestern Bell claimed that the purchase price of $200,000 is a fair value and sought to minimize its importance by showing that it would have no effect upon rates. Once the purchase was consummated, the company argued, and all of the accounting data known, it would submit its accounting entries, including the treatment of the purchase price, in accordance with the FCC's rules. With respect to this argument, Irion's opinion stated:

> There is an element of sophistry . . . in the contention that the purchase price can be totally divorced from the question of rates. The record contains no evidence as to how the investment of $200,000 would be treated for rate-making purposes. Even compliance with the requirements of the commission's Uniform System of Accounts would not bar Southwestern Bell from claiming the excess of purchase price over original cost as an item of the rate base to support higher intrastate rates. . . . the possible effect of the acquisition as a factor in future rate making is one matter to be considered and this relates to the question of public interest quite as much as to whether the subscribers will benefit. Assuming, therefore, that the stated purchase price is an unreasonable one, the certificate should be refused on the ground that the acquisition would not be in the public interest.

IRION said there was no assurance that subscribers, either present or potential, in the Tomball area, would receive the various sorts of relief which they need either at an early date or, in fact, at any time. Furthermore, Irion found nothing in the record to demonstrate that the Tomball Company is financially or otherwise incapable of making additions to its sys-

tem, of effecting service improvements, or of performing adequate maintenance. Whatever benefit might accrue to the area by the sale to Southwestern Bell, he continued, would lie in the facility with which the exchange could be integrated into Southwestern's Houston exchange, plus certain rehabilitation of outside plant. As against these apparently slight advantages, he said, present and prospective customers would be faced with the likelihood of substantially higher rates. This was substantially in line with the FCC's common carrier bureau opinion, recommending denial of Southwestern's application. The opinion stated:

> Although this commission does not have jurisdiction to determine the reasonableness of intrastate charges, the fact that such charges will be higher under the proposed acquisition is a factor to be considered in determining whether the acquisition will or will not be of advantage to the persons to be served. When such increased rates are weighed against the nebulous service advantages claimed by Bell, it is impossible to say on the basis of this record that there is a net balance of advantage to the persons to be served.

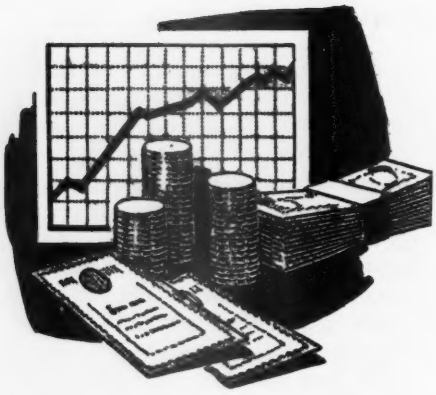
IRION declined to rule on an interesting contention made by representatives of the United States Independent Telephone Association and the Texas Telephone Association. Both groups intervened in the hearings in opposition to Southwestern Bell's application on grounds that it tended to promote monopoly. USITA General Counsel Bradford Ross argued that the Bell system should not, in the interest of avoiding monopoly, be permitted to buy up an independent company's property as long as other independents might be willing to do so. Irion's decision stated:

> Interveners appeared to argue that, since certain independent telephone companies would be interested in purchasing the Tomball properties and would be financially able and willing to produce all the desired improvements, a grant of this application would tend to promote monopoly. This proposition cannot be considered abstractly and there is no evidence that the Tomball Company could or would sell to an independent nor what the purchase price would be nor what benefits would accrue to subscribers. It is sufficient to say that, on the basis of this record, the contention must be rejected.

The denial of the application was without prejudice to a renewal of the application on a different basis. If Irion's ruling remains unchanged, there is a possibility that either Southwestern Bell or an independent company might arrive at a different agreement for buying the Tomball property.

Minimum Wage Legislation

OBSERVERS are inclined to the belief that the Senate Labor Committee may extend minimum wage amendments in line with the recommendations of the Eisenhower administration proposals to increase the minimum wage from 75 cents to 90 cents. Labor unions are naturally pressing for a higher minimum and there are pressures from other quarters for substantial changes in the wage-hour law. At the hearings before the committee last month, the president of the CIO Communications Workers of America, Joseph A. Beirne, called for increases ranging up to as high as $1.50 an hour. Beirne also asked for the elimination of the present exemption, under the Fair Labor Standards Act, of telephone operator wages at exchanges of 750 stations or less.



Financial News and Comment

By OWEN ELY

New Appraisal of Future Progress with Atomic Power

In an address before the American Power Conference April 1st, Kenneth Davis, director of the division of reactor development of the AEC, gave some interesting new estimates regarding possible future progress in developing atomic power. He pointed out that the nuclear fuels—uranium and thorium—are basically very plentiful; even common granite contains these elements and, assuming that 10 per cent could be recovered and fissioned, has a "fuel value" about eight times that of coal.

In the development of atomic reactors there has now been considerable progress in lowering construction costs, since there is some tendency to concentrate on the cheapest type of reactors, although these may not have the greatest ultimate potential from an operating angle. The Duquesne plant (pressurized water reactor) is expected to cost over $600 per kilowatt. But now costs as low as $80 to $100 per kilowatt (for the nuclear boiler only) have been estimated for newer plants of 75,000 to 150,000 kilowatts. While this is still substantially more than the $40 to $70 per kilowatt for conventional boilers, it is very encouraging.

Operating costs will remain very high, however, so that Mr. Davis estimates "that we do not know *today* how to build a nuclear power plant which would produce power for much less than two to three times that from the best conventional plant of the same size which could be built instead. . . . If the investment required for a nuclear plant is not too much out of line with that for a conventional plant, a utility company is perhaps not taking a very large risk when it assumes that operating costs —including fuel fabrication, chemical processing, etc.—will decrease with additional development and with an increase in the scale of operations."

Mr. Davis foresees three phases in the transition to nuclear power plants. First is the "induction phase" when some fairly large nuclear plants will be built, largely with private funds, with the gov-

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ernment lending fissionable material and financing research. (This phase is already under way.) Second would be the "expansion phase," which he expects to begin in about ten years, when the proportion of nuclear to total new generating capacity may jump from perhaps 5 per cent to 60 per cent, due to rising confidence in the eventual economic advantages of nuclear power. The third period would be the "saturation phase," when the proportion of nuclear to total new construction will rise more slowly, up to perhaps 75 per cent.

Mr. Davis feels that there may still be some construction of conventional fuel plants at this point, where the size is small or the fuel cost is exceptionally low. However, he thinks that by 1960 we may have 2,000,000 kilowatts of nuclear power generating capability; by 1965, 5,000,000 kilowatts; by 1970, 27,000,000 kilowatts; and by 1977, 100,000,000 kilowatts—almost as much as we have now in conventional plants. The nuclear plants would then probably represent an investment of nearly $20 billion, or an average of about $200 per kilowatt. (This estimate presumably includes the generator and accessories in addition to the boiler—the previous estimates being merely for the boiler.)

In considering forecasts such as Mr. Davis' it is worth while to remember that so long as the government continues to finance a huge research program, nuclear energy will remain a highly dynamic industry. Already there are hints that nuclear power may be "souped up" by injecting some relatively inexpensive lithium 6 into the nuclear firebox. (See *Wall Street Journal* story, "H-Bomb Harnessing," April 18th.) The extremely high temperature generated by *fission* of heavy elements is needed to trigger the *fusion* of the atoms of light elements such as hydrogen and lithium. Both processes create tremendous power, but fusion would seem to have much lower cost possibilities and permit simpler processing—if a way could be found to provide the necessary temperature of 1,000,000 degrees or more without having to use the fission process as a pilot light. Some gossip items in science reviews have suggested that this may eventually be accomplished through exploding a very fine electric wire by forcing a high-voltage current through it. It would be interesting to have some confirmation of this possibility. Another question would be whether the use of the fusion process (without accompanying fission of heavy elements) would avoid creating the dangerous radioactivity which accompanies the fission process, and which is responsible for much of the heavy operating cost in attempting to tame fission for utility use.

Perhaps some day the AEC can enlighten us.

Utility Stocks Popular with Mutual Funds and Colleges

According to the financial editor of the *Detroit News*, 138 mutual funds recently had invested over a billion dollars in the securities of 220 public utilities. The holdings (as broken down by the National Association of Investment Companies) were made up of $860,000,000 common stocks (72 per cent); $196,000,000 preferred stocks (19 per cent); and $95,000,000 bonds (9 per cent). The common stock holdings included securities of 189 companies in all branches of the utility industry.

The largest holdings were in American Telephone and Telegraph Company with over $32,000,000 in stock and $3,000,000 in debentures. AT&T common was held by 39 mutuals, being exceeded in this re-

spect only by United Gas Corporation which was held by 43 funds. However, based on common stock holdings only, General Public Utilities ranked second to AT&T with about $30,000,000 owned by 37 mutuals.

Other popular names were Pacific G&E, Niagara Mohawk Power, Tennessee Gas Transmission, Middle South Utilities, Southern California Edison, American Gas & Electric, Consolidated Edison of New York, Central & South West Corporation, Texas Utilities, Southern Company, Northern Natural Gas, American Natural Gas, Illinois Power, Consolidated Natural Gas, Columbia Gas, Panhandle Eastern Pipe Line, and Public Service Electric & Gas. American & Foreign Power topped the bond list, while Tennessee Gas Transmission had first position (based on dollar holdings) in the preferred stock list.

IN the March issue of *The Exchange,* published by the New York Stock Exchange, the equity investments of the Ivy League colleges—Harvard, Yale, Princeton, and Columbia — were analyzed. Among the favored utilities whose stocks were held by these colleges were Middle South Utilities, North American (now Union Electric of Missouri), New England Electric, Niagara Mohawk Power, Columbia Gas, Carolina Power & Light, Ohio Edison, Southern Company, El Paso Natural Gas, Southern Natural Gas, and Northern States Power.

How Much Weight Do Investors Give Retained Earnings?

MELVILLE G. ARNSTEIN, a member of the staff of the New York Public Service Commission, has prepared an interesting analysis of the relative importance of dividends *versus* earnings in determining the price of an electric utility common stock. His study (prepared as a personal research) was based on a comprehensive list of electric utility stocks, with data compiled for various dates in 1953-55. He developed the accompanying table, showing the relative importance assigned to dividends and retained earnings (P = Price, E = Earnings, and D = Dividends). Thus on June 1, 1953, the ratio of the dividend multiplier was 2.9 times the earnings multiplier; while on March 1, 1955, the ratio had dropped to 1.6—in other words, earnings had become more important than on the earlier date.*

His conclusion is that although dividends are basically more important than earnings in determining market value, earnings are becoming relatively more important in the current market. He concludes:

If we were to assume a situation

*He assumed that the market price for utility stocks was equal to earnings times a constant plus dividends times a constant. Thus

$$p = a\,e + b\,d$$

where p = price, e = earnings, d = dividends, and a and b are the constants. Dividing this equation through by e gives the formula $p/e = a + b\,d/e$. This equation was solved by the use of least squares.

	Equation	*Ratio of Multipliers Of D to E*	*Average Yield 120 P.U. Stocks*	*Moody's Yield on P.U. Bonds*
June 1, 1953	P = 4.1E + 12.0D	2.9	5.7%	3.57%
Dec. 1, 1953	P = 4.7E + 11.7D	2.5	5.5	3.38
June 1, 1954	P = 5.9E + 11.5D	1.9	5.2	3.13
Dec. 1, 1954	P = 5.9E + 12.3D	2.1	4.9	3.10
Mar. 1, 1955	P = 7.3E + 11.6D	1.6	4.6	3.17

where we had 2 per cent yields with normal pay-out ratios and interest rates at today's level, the stocks would certainly be selling on earnings, and dividends would have relatively less weight. The chemical group would be an example of this type of situation. In other words, it seems to me that so long as the stocks are selling on, or near, a money basis, the dividend will have a greater weight, but once they get out of line they will tend to sell more on earnings.

PERHAPS there is another way of looking at the matter. If we take a list of selected electric utilities which are considered "growth" stocks, it is possible to arrange these by territorial groups and to obtain adjusted "yields" by using the rule-of-thumb method of weighting retained earnings only half as much as dividends. This method seems to smooth out some irregularities and gives the results shown in the following table:

	Yield	*Adjusted Yield**
Florida Group		
Florida Power Corp.	3.3%	4.0%
Florida Power & Light	2.7	4.0
Tampa Electric	3.6	4.3
Texas Group		
Houston Lighting	2.8	4.0
Texas Utilities	3.3	4.3
Central & South West	4.1	5.1
Gulf States Power	4.2	4.9
Southwestern Public Service	4.8	5.2
El Paso Electric	4.0	5.0
Western Group		
Idaho Power	3.8	5.0
Arizona Public Service	3.5	4.5
Tucson G. E. L. & P.	4.1	5.3

*Based on dividend plus half of retained earnings.

For those interested in "formula" methods of appraising utility stocks we again refer to the analytical methods used by Walter Leason of Montgomery, Scott & Co., who has just issued a 28-page "Coordinated Study of Leading Electric Power and Light Company Common Stocks, Third Edition." It covers 70 stocks, analyzing the factors of capitalization, rate of return, current earnings, dividend payments, and growth prospects. To quote from the study:

> The ability to pay dividends is examined to secure a standard or reasonable dividend for each company. This indicates the security of the current dividend as well as the possibility of a higher rate being paid. Each company's growth through expansion of generating capacity is examined for the next few years. These considerations are then co-ordinated and an opinion is expressed on the value of each stock at current prices.

Rights and Taxes

UNDER the old tax law, if subscription rights on utility stocks were sold or exercised, it was necessary for the stockholder to do some elaborate cost accounting for future tax purposes. It was necessary to apportion the cost basis of the old stock between the stock and the rights in accordance with their relative market values on the record date. For example, holders of Philadelphia Electric stock who exercised their rights issued June 9, 1954, had to apportion costs on the following basis:

	Average Market Value June 9, 1954	*Apportionment Percentage*
Original Stock (ex-rights)	$36.296875	99.4435%
Rights	0.203125	0.5565
Total	$36.50	100.0000%

The new Tax Code which became effective last June now saves stockholders the trouble of working out this apportionment, unless they prefer to do it. Under the new permissive rôle proceeds of the sale of the rights can be considered as a capital gain —long-term or short-term, depending on

the holding period of the stock on which the rights were received. And if the rights are exercised this merely means that the cost basis of the new stock is the subscription price, which means in effect that the holder will eventually pay a capital gain tax on the rights. But the cost of original holding does not have to be adjusted.

BROKERS' UTILITY ANALYSES*

Company Analyses	*Firm*	*No. Pages*	*Issued*
American Gas & Elec.	Argus Research Corporation	2	April
American Tel. & Tel.	J. R. Williston & Co.	2	April
Brazilian Traction	Arthur Wiesenberger & Co.	12	February
Brooklyn Union Gas	Orvis Brothers & Co.	3	February
Central & South West Corp.	Blyth & Co.	6	March
Central Illinois Light	White, Weld & Co.	4	February
Central Vermont P. S.	Ira Haupt & Co.	1	January
Cincinnati G. & E.	Goodbody & Co.	3	February
Cleveland Elec. Illum.	Argus Research Corporation	2	March
Con. Gas of Baltimore	Argus Research Corporation	2	March
Consumers Power Co.	Kerr & Co.	4	April
General Telephone	Argus Research Corporation	2	February
International Tel. & Tel.	Shearson, Hammill & Co.	7	February
Iowa Southern Utilities	G. A. Saxton & Co., Inc.	1	February
Iowa Southern Utilities	Ira Haupt & Co.	1	March
Niagara Mohawk Power	Goodbody & Co.	2	February
Niagara Mohawk Power	A. G. Becker & Co., Inc.	2	April
Nor. Indiana P. S.	R. W. Pressprich & Co.	4	January
Ohio Edison	Josephthal & Co.	1	April
Pacific G. & E.	Argus Research Corporation	2	February
Phila. Electric Co.	Argus Research Corporation	?	March
Phila. Suburban Water	E. W. Clark & Co.	1	January
Public Service Elec. & Gas	A. G. Becker & Co., Inc.	2	January
Public Service of Indiana	Argus Research Corporation	2	February
Pub. Serv. Co. of No. Carolina	Cohu & Co.	2	February
Puget Sound P. & L.	Josephthal & Co.	2	March
Southern Nevada Power	William R. Staats & Co.	6	Dec. '54
Tennessee Gas Trans.	White, Weld & Co.	4	March
Three States Nat. Gas Co.	H. Hentz & Co.	3	March
Union Elec. Co. of Missouri	Argus Research Corporation	2	February
United Gas Improvement	Vilas & Hickey	9	January
Virginia Elec. & Power	Goodbody & Co.	2	February
Washington Water Power	Kidder, Peabody & Co.	22	March
Wisconsin Elec. Power	Argus Research Corporation	2	January
Wisconsin P. & L.	Loewi & Co. (Milwaukee)	—	February
Regular Bulletins and Tabulations			
Monthly Review of Utility Developments	Josephthal & Co.	4	April
Co-ordinated Study of Leading Utility Common Stocks	Montgomery, Scott & Co.	28	April
Monthly Tabulation of Utility Stock Earnings	Weeden & Co.	2	February
Public Utilities Bulletin	Eastman, Dillon & Co.	10	April
Public Utility Common Stocks	W. L. Lyons & Co. (Lexington, Ky.)	2	April
Other Bulletins on General Topics			
Comparison of Eleven Electric Utility Growth Stocks	Goodbody & Co.	13	January
Electric Utility Industry	H. Hentz & Co.	4	March
Electric Utilities—Growth Plus Defense	E. F. Hutton & Co.	7	March
Electric Utilities Still Have Solid Promise	Moody's Investor Service	4	March
Ten Utility Stocks for Income	Goodbody & Co.	2	February

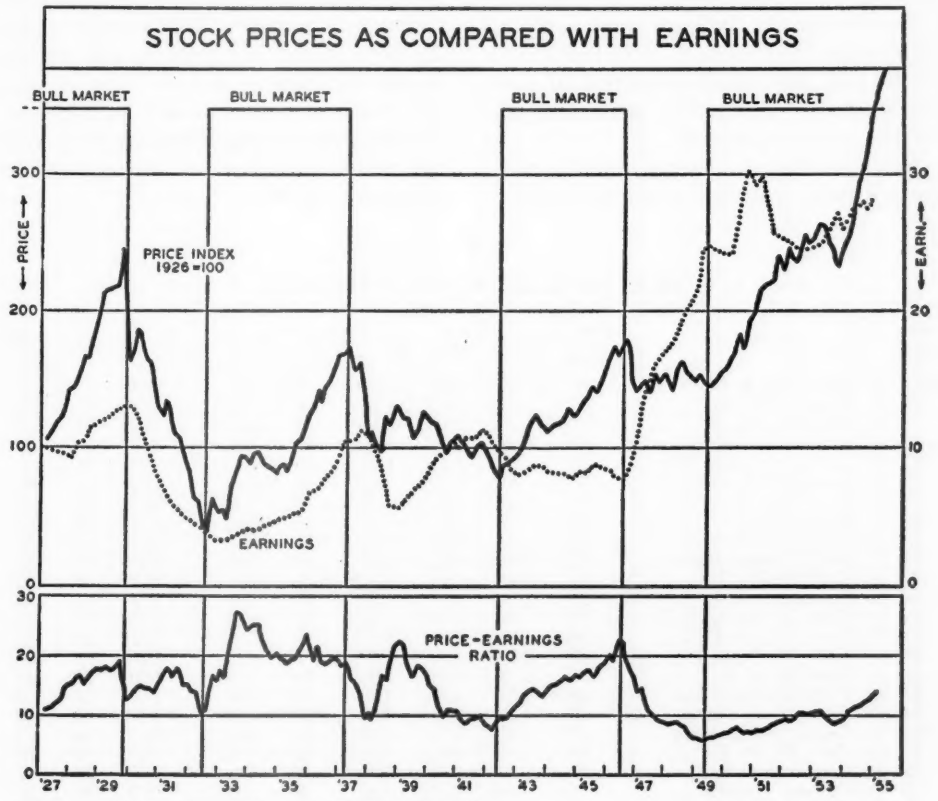
*Similar lists appeared in the February 3, 1955, issue, and in the November 11th, July 22nd, and March 18th issues of 1954; also in preceding years.

However, apportionment on the old basis is still *required* (a) where market value of the rights is more than 15 per cent of market value of the stock at the time of distribution, or (b) when nontaxable rights are issued in compliance with an SEC order. The latter presumably refers to holding company subscription offerings such as the pending rights offering of United Gas Corporation by Electric Bond and Share. There will be very few such utility rights in future.

Are Stocks Dangerously High?

THE Fulbright investigation caused a temporary pause in the bull market, but industrial and rail stocks subsequently advanced into new high ground. Utilities, possibly retarded by the hardening of money rates, did not quite reach the peak of early March. Industrial stocks, as measured by Dow-Jones average and the more comprehensive Standard & Poor's average, as of April 21st, had advanced well beyond the 1929 highs, which led to fears in some quarters that the bull market was reaching dangerous levels. Evidently the FRB was concerned, as it again raised margin rates, the rate for new purchases now being 70 per cent.

However, based on indices other than price, the market does not seem too badly inflated—at least as compared with the



Source, Cleveland Trust Company Business Bulletin

1929 peak, which may not be a very good test.

The chart on page 563, prepared by the Cleveland Trust Company, shows that price-earnings ratios recently were below the 1929 peak—though it is interesting to note that the PE-ratio was even higher in 1933 than in 1929, because earnings dropped faster than prices.

ANOTHER possible test is the ratio of industrial stock yields to high-grade bond yields, and according to a study by Standard & Poor's the ratio at the end of 1954 was 180 per cent compared with only 72 per cent in 1929. (However, 1929 bond yields were 84 per cent higher than now.) A third test is the relation of stock prices to book value. At the high point in 1929 the average book value of fifty industrial stocks was only about one-third of the average stock price, while at the end of 1954 it was 54 per cent.

While the figures may not mean a great deal, "Brevits" points out that since 1929 the volume of retail sales has increased about 250 per cent, with gross national product, personal income, and bank deposits showing gains almost as large. Farm income has lagged with an increase of only about 135 per cent, while housing "starts" are a little better.

WHILE the stock market enjoyed a big advance in March and April (especially the rails) and seems due for a temporary reaction, the recent sharp rise in business activity, earnings, and dividends are supporting factors—plus prospect for tax cuts before the election next year. But there are a few sour notes, such as the possible overbuilding of homes, our huge consumer credit, and the poor showing of the commodity markets. While the Federal Reserve Board has recently put on the brakes by raising margin requirements and rediscount rates, it will doubtless cooperate with the administration to prevent any real upset in business and any serious depression in 1956.

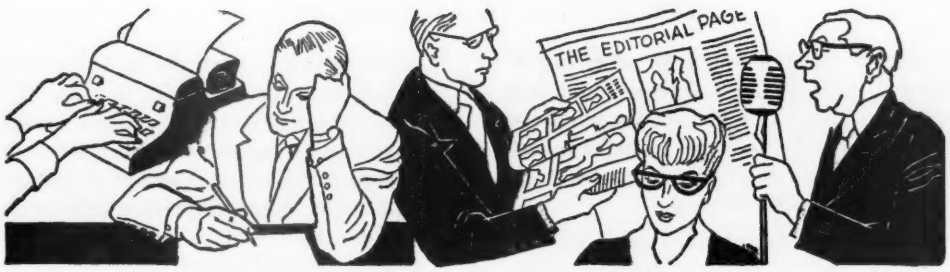
DATA ON ELECTRIC UTILITY STOCKS

1954 Rev. (Mill.)			*4/21/55 Price About*	*Div. Rate*	*Current Yield*	*Share Earnings Cur. Period*	*Share Earnings % Increase*	*Share Earnings 12 Mos. Ended*	*Price-Earns. Ratio*	*Dividend Payout*	*Common Stock Equity*
$230	S	Amer. Gas & Elec.	45	$1.80	4.0%	$2.60**	6%	Feb.	17.3	69%	33%
35	O	Arizona Pub. Serv.	25	.90	3.6	1.58	21	Feb.	15.8	57	28
9	O	Arkansas Mo. Pr.	25	1.12a	4.5	1.76	40	Dec.	14.2	64	30
27	S	Atlantic City Elec.	40	1.60b	4.0	2.16	19	Feb.	18.5	74	30
107	S	Baltimore Gas & Elec.	33	1.40	4.2	1.89	23	Dec.	17.5	74	37
5	O	Bangor Hydro-Elec.	34	1.80	5.3	2.45	19	Dec.	13.9	73	33
4	O	Black Hills P. & L.	26	1.28	4.9	2.10	7	Jan.	12.4	61	26
86	S	Boston Edison	56	2.80	5.0	3.12	5	Dec.	17.9	90	53
17	A	Calif. Elec. Power	13	.60	4.6	.73	D11	Dec.	17.8	82	34
14	O	Calif. Oregon Power	32	1.60	5.0	1.82	32	Nov.	17.6	88	36
7	O	Calif.-Pacific Util.	27	1.40	5.2	2.16**	2	Jan.	12.5	65	30
54	S	Carolina P. & L.	25	1.10	4.4	1.50	11	Feb.	16.7	73	32
23	S	Cent. Hudson G. & E.	17	.76	4.5	.99	21	Dec.	17.2	77	33
16	O	Cent. Ill. E. & G.	34	1.60	4.7	2.31	11	Dec.	14.7	69	32
30	S	Cent. Ill. Light	49	2.20	4.5	3.07	7	Feb.	16.0	72	40
46	S	Cent. Ill. P. S.	25	1.20	4.8	1.93	34	Dec.	13.0	62	33
10	O	Cent. Louisiana Elec.	28	1.20	4.3	1.53	8	Dec.	18.3	78	30
30	O	Cent. Maine Power	25	1.20	4.8	2.00	27	Mar.	12.5	60	30
105	S	Cent. & South West	32	1.32	4.1	2.00	16	Dec.	16.0	66	33
10	O	Cent. Vt. P. S.	19	.92	4.8	1.33	56	Feb.	14.3	69	30
95	S	Cincinnati G. & E.	27	1.20	4.4	1.71	13	Dec.	15.8	58	37
5	O	Citizens Utilities	15	.48h	6.2h	1.05	8	Sept.	14.3	46	38
91	S	Cleveland El. Illum.	69	2.60	3.8	3.86	D4	Dec.	17.9	67	44

1954 Rev. (Mill.)		(Continued)	4/21/55 Price About	Div. Rate	Current Yield	Share Earnings Cur. Period	% Increase	12 Mos. Ended	Price-Earns. Ratio	Dividend Payout	Common Stock Equity
3	O	Colo. Cent. Pwr.	30	1.20	4.0	1.67	14	Sept.	18.0	72	39
35	S	Columbus & S. O. E.	30	1.60	5.3	1.84	D7	Dec.	16.3	87	33
310	S	Commonwealth Edison	40	1.80c	4.5	2.70	14	Dec.	14.8	67	49
10	A	Community Pub. Service	24	1.00#	4.2	1.69	5	Dec.	14.2	59	49
2	O	Concord Electric	40	2.40	6.0	2.64	6	Dec.	15.2	91	63
60	O	Connecticut L. & P.	20	.98	4.9	1.12	10	Feb.	17.9	82	38
19	O	Connecticut Power	43	2.25	5.2	2.30	D5	Dec.	18.7	98	41
474	S	Consol. Edison	51	2.40	4.7	2.97	NC	Jan.	17.2	81	43
170	S	Consumers Power	49	2.20	4.5	3.11	7	Jan.	15.8	71	42
61	S	Dayton P. & L.	46	2.00	4.3	2.88	4	Dec.	16.0	69	36
31	S	Delaware P. & L.	35	1.50	4.3	2.08	13	Dec.	16.8	72	35
196	S	Detroit Edison	36	1.60	4.4	2.13	10	Feb.	16.9	75	45
113	A	Duke Power	54	2.00	3.7	3.33	7	Dec.	16.2	60	53
81	S	Duquesne Light	36	1.80	5.0	2.26	2	Dec.	15.9	80	32
27	O	Eastern Util. Assoc.	34	2.00	5.8	2.33	2	Feb.	14.6	86	33
2	O	Edison Sault Elec.	13	.60	4.6	1.04	27	Dec.	12.5	48	49
10	O	El Paso Elec.	40	1.60	4.0	2.42	21	Feb.	16.5	66	37
10	S	Empire Dist. Elec.	27	1.40	5.2	1.96	D9	Dec.	13.8	71	32
4	O	Fitchburg G. & E.	55	3.00	5.5	3.26	16	Dec.	16.9	92	53
38	S	Florida Pwr. Corp.	48	1.60	3.3	2.22	17	Dec.	21.6	72	30
79	S	Florida P. & L.	66	1.80	2.7	3.50	25	Dec.	18.9	51	35
163	S	General Pub. Util.	37	1.70	4.6	2.42	13	Dec.	15.3	70	39
6	O	Green Mt. Power	34	1.80	5.3	2.32	35	Feb.	14.7	78	39
47	S	Gulf States Util.	34	1.40	4.1	1.91	1	Feb.	17.8	73	30
20	A	Hartford E. L.	57	2.75	4.8	3.54	8	Dec.	16.1	78	47
5	O	Haverhill Elec.	44	2.15†	4.9	1.95	D35	Dec.	22.6	110	100
58	S	Houston L. & P.	44	1.20	2.7	2.18	26	Feb.	20.2	55	40
7	O	Housatonic P. S.	26	1.40	5.4	1.58	20	Dec.	16.5	89	46
23	S	Idaho Power	58	2.20	3.8	3.60	8	Dec.	16.1	61	35
70	S	Illinois Power	50	2.20	4.4	3.05	18	Feb.	16.4	72	35
37	S	Indianapolis P. & L.	27	1.10	4.1	1.61	1	Dec.	16.8	68	35
18	S	Interstate Power	14	.70	5.0	.97	7	Dec.	14.4	72	30
27	O	Iowa Elec. L. & P.	25	1.25	5.0	1.83	11	Feb.	13.7	68	30
31	S	Iowa-Ill. G. & E.	33	1.80	5.5	2.20	D2	Feb.	15.0	82	39
31	S	Iowa Power & Lt.	28	1.40	5.0	1.83	D6	Dec.	15.3	77	30
27	O	Iowa Pub. Service	16	.70	4.4	1.05	7	Jan.	15.2	67	29
12	O	Iowa Southern Util.	22	1.20	5.5	1.56	—	Feb.	14.1	77	38
51	S	Kansas City P. & L.	42	1.80	4.3	2.33	7	Feb.	18.0	77	34
25	O	Kansas Gas & Elec.	57	2.40	4.2	3.96	14	Feb.	14.4	61	31
36	S	Kansas Pr. & Lt.	24	1.20	5.0	1.56	18	Dec.	15.4	77	26
35	O	Kentucky Util.	26	1.20	4.6	2.07	20	Dec.	12.6	58	33
6	O	Lake Superior D. P.	43	2.20	5.1	2.85	2	Dec.	15.1	77	37
5	O	Lawrence Elec.	30	1.60	5.3	1.40	D25	Dec.	21.4	77	63
77	S	Long Island Ltg.	23	1.00	4.3	1.21	19	Dec.	19.0	83	32
41	S	Louisville G. & E.	48	1.80	3.8	3.35	2	Dec.	14.3	54	34
7	O	Lowell Elec. Lt.	57	3.50†	6.1	3.74	3	Dec.'53	15.2	94	65
8	O	Lynn G. & E.	29	1.60	5.5	2.01	D7	Dec.	14.4	80	75
7	O	Madison G. & E.	42	1.60	3.8	3.20	2	Dec.	13.1	50	53
3	A	Maine Public Service	30	1.60	5.3	2.14	28	Feb.	14.0	75	35
4	O	Michigan G. & E.	38	1.35h	6.6h	3.13	4	Dec.	12.1	43	31
144	S	Middle South Util.	33	1.50	4.5	2.16	3	Feb.	15.3	69	35
24	S	Minnesota P. & L.	24	1.20	5.0	1.72	D13	Feb.	14.0	70	35
2	O	Miss. Valley P. S.	27	1.40g	5.2	2.44	12	Mar.	11.1	57	30
10	A	Missouri P. S.	15	.60	4.0	.90	14	Dec.	16.7	67	28
5	O	Missouri Util.	26	1.24	4.8	1.98	21	Dec	13.1	63	35
31	S	Montana Power	36	1.60	4.4	2.58	D3	Feb.	14.0	62	36
122	S	New England Elec.	18	.90	5.0	1.24**	—	Dec.	14.5	73	34
38	O	New England G. & E.	18	1.00	5.6	1.34**	D3	Feb.	13.4	75	37
43	O	New Orleans P. S.	45	2.25	5.0	2.65	2	Feb.	17.0	85	39
2	O	Newport Electric	38	2.00	5.3	2.50	D15	Feb.	15.2	80	34
73	S	N. Y. State Elec. & Gas	41	2.00	4.9	2.59	D2	Feb.	15.8	77	35
210	S	Niagara Mohawk Pwr.	34	1.60	4.7	2.11	4	Dec.	16.1	76	34
68	O	Northern Ind. P. S.	34	1.60	4.7	2.53	14	Feb.	13.4	63	34
118	S	Northern States Pr.	17	.80	4.7	1.07	7	Dec.	15.9	75	29
9	O	Northwestern P. S.	17	.90	5.3	1.25	D1	Dec.	12.6	72	27

1954 Rev. (Mill.)		(Continued)	4/21/55 Price About	Div. Rate	Current Yield	Share Earnings Cur. Period	Share Earnings % Increase	Share Earnings 12 Mos. Ended	Price-Earns. Ratio	Dividend Payout	Common Stock Equity
110	S	Ohio Edison	48	2.20	4.6	3.10	7	Feb.	15.5	71	41
40	S	Oklahoma G. & E.	35	1.60	4.6	2.28	23	Feb.	15.4	70	30
14	O	Otter Tail Power	31	1.60	5.2	1.93	D5	Feb.	16.1	83	31
386	S	Pacific G. & E.	48	2.20	4.6	2.88	2	Dec.	16.7	76	39
40	O	Pacific P. & L.	26	1.30	5.0	1.54	D7	Dec.	16.9	84	28
109	S	Penn Power & Lt.	47	2.40	5.1	2.89	12	Feb.	16.3	83	29
10	A	Penn. Water & Pw.	48	2.00	4.2	2.73	28	Dec.	17.6	73	29
196	S	Philadelphia Elec.	39	1.80	4.6	2.25	3	Dec.	17.3	80	36
29	O	Portland Gen. Elec.	23	1.00	4.3	1.48	16	Jan.	15.5	68	42
52	S	Potomac Elec. Pwr.	21	1.00	4.8	1.17	2	Feb.	17.9	85	36
63	S	Pub. Serv. of Colo.	41	1.60	3.9	2.31	D1	Dec.	17.7	69	34
250	S	Pub. Serv. El. & Gas	31	1.60	5.2	2.00*	—	Dec.	15.5	80	31
62	S	Public Serv. of Ind.	41	2.00	4.9	2.42	3	Feb.	16.9	83	34
23	O	Public Serv. of N. H.	18	.90	5.0	1.37	57	Mar.	13.1	66	28
10	O	Public Serv. of N. M.	16	.68	4.3	.96	43	Dec.	16.7	71	31
21	S	Puget Sound P. & L.	38	1.72	4.5	2.07	10	Jan.	18.4	83	58
49	S	Rochester G. & E.	48	2.24	4.7	3.20	D3	Dec.	15.0	70	34
14	O	Rockland L. & P.	18	.60	3.3	.83	36	Dec.	21.7	72	29
7	S	St. Joseph L. & P.	25	1.32	5.3	1.76	1	Dec.	14.2	75	43
39	S	San Diego G. & E.	18	.80	4.4	1.06	10	Feb.	17.0	75	44
8	O	Sierra Pacific Pr.	38	2.00	5.3	2.56	13	Feb.	14.8	78	28
154	S	So. Calif. Edison	50	2.40	4.8	3.05	31	Dec.	16.4	79	37
34	S	So. Carolina E. & G.	19	.90	4.7	1.38**	14	Feb.	13.8	65	28
6	O	Southern Colo. Pr.	16	.70	4.4	1.21	D1	Feb.	13.2	58	41
194	S	Southern Company	21	.90	4.3	1.29	3	Feb.	16.3	70	29
14	S	So. Indiana G. & E.	32	1.50	4.7	2.34	18	Feb.	13.7	64	34
4	O	So. Nevada Power	18	.80	4.4	1.48	45	Dec.	12.2	54	64
1	O	Southern Utah Pr.	14	1.00	7.1	.88	D13	Feb.	15.9	114	39
3	O	Southwestern E. S.	21	1.00	4.8	1.61	6	Feb.	13.0	62	31
33	S	Southwestern P. S.	28	1.32	4.7	1.56	11	Feb.	17.9	85	30
20	A	Tampa Elec.	28	1.00	3.6	1.43	11	Feb.	19.6	70	36
117	S	Texas Utilities	71	2.32	3.3	3.90	20	Feb.	18.2	59	37
35	S	Toledo Edison	15	.70	4.7	1.02	10	Dec.	14.7	69	29
11	O	Tucson G. E. L. & P.	26	1.04	4.0	1.64	17	Dec.	15.9	63	40
114	S	Union Elec. of Mo.	31	1.40	4.5	1.65	21	Dec.	18.8	85	36
28	O	United Illuminating	52	2.50†	4.8	3.13	8	Dec.	16.6	80	51
4	O	Upper Peninsula Pr.	27	1.40	5.2	2.38	60	Dec.	11.3	59	31
32	S	Utah Power & Lt.	46	2.00	4.3	2.97	25	Feb.	15.5	67	41
96	S	Virginia E. & P.	37	1.40	3.8	2.24	37	Jan.	16.5	63	32
23	S	Washington Water Pr.	38	1.70	4.5	1.93	7	Feb.	19.7	88	33
116	S	West Penn Elec.	25	1.20	4.8	1.90	9	Feb.	13.2	63	27
64	O	West Penn Power	48	2.40	5.0	2.97	15	Dec.	16.2	81	33
10	O	Western Lt. & Tel.	29	1.60	5.5	2.42	D6	Dec.	12.0	66	27
22	O	Western Mass. Cos.	43	2.20	5.1	2.96	12	Feb.	14.5	74	51
88	S	Wisconsin Elec. Pr.	34	1.50	4.4	2.09	16	Dec.	16.3	72	40
35	O	Wisconsin P. & L.	26	1.28	4.9	1.68	D3	Dec.	15.5	76	34
31	S	Wisconsin Pub. Ser.	23	1.10	4.8	1.52	11	Dec.	15.1	72	34
		Averages			4.7%				15.8	72%	
		Foreign Companies									
$219	S	American & Foreign Pr.	15½	$ .75(e)	4.8%	$2.40	2%	Sept.	6.5	31%	50%
116	A	Brazilian Trac. L. & P.	9	1.00(f)	11.1	1.40	D53	Dec.'53	6.4	71	67
56	A	British Columbia Pr.	28	1.00	3.4	1.62	16	Dec.	17.3	62	28
16	A	Gatineau Power	32	1.20	3.8	1.99	12	Dec.	16.1	60	30
10	A	Quebec Power	29	1.20	4.1	1.56	20	Dec.	18.6	77	44
45	A	Shawinigan Wtr. & Pr.	56	1.45	2.6	2.84	25	Dec.	19.7	51	35

B—Boston Exchange. A—American Stock Exchange. O—Over-counter or out-of-town exchange. S—New York Stock Exchange. D—Decrease. *If additional common shares have been recently offered, earnings are adjusted to give effect to the offering. Percentage change is in the net income available for common stock. **Based on average number of shares. h—Also regular annual 3 per cent stock dividend, which is included in the yield. b—Also 5 per cent stock dividend. c—Also 3/10 share of Northern Illinois Gas for each share of Commonwealth Edison. #—Also occasional stock dividends. †—Estimated. a—Also 8 per cent stock dividend. e—Includes 15 cents extra. f—Approximate equivalent in cash and stock. g—Also 10 per cent stock dividend.



What Others Think

Electric Labor Looks at Corporate Management

THE story goes that when you give a Scotsman a dollar, that's capital. But when you try to get a dollar from a Scotsman, that's labor. As one of those in charge of union pension fund money, J. Scott Milne, international president of the International Brotherhood of Electrical Workers (AFL), might be that Scotsman with the capital. At least that was his own view of himself, expressed before the Chicago group of the American Society of Corporate Secretaries, as he spoke on labor's efforts at management, and the topic "Why Don't Labor Unions Use Stock Ownership as a Means to Participate in Corporate Management?" He said:

> . . . I believe that by telling you briefly why we were founded and what we have attempted through the years and are still attempting today to do for our membership, will explain pretty adequately our position with regard to corporate management.
>
> Our brotherhood was founded . . . for the same reason that other unions were founded, to obtain decent wages and hours and some measure of safety for our people. . . . There have always been decent employers in every day and age who have played fair and square with the men and women they employed. But there were others who would not, and by ruthless, unscrupulous methods, they not only reduced the situation of their workers to a pitiable state, they often ran their fair competitors out of business.
>
> In the electrical industry in 1891, young men had their lives snuffed out on the high lines day after day, because there were no safety standards. And they worked long hours on those high lines, in all kinds of weather, for as low as 10 cents an hour. . . . Before the turn of the century, safety conditions for electrical workers were so bad, that *one out of every two* was killed every year, and no insurance company in the country would insure them—*at any premium!* It was because of conditions like that that labor unions were born, and I know that there is no man, knowing all the facts, who would not say that they were necessary.

THIS brought Mr. Milne to his main topic. The labor union, he said, set up certain objects and standards to better the conditions of electrical workers; and in order to give the workers more security, it set up a death benefit and later a pension fund for them. The money the union is investing today in stocks is that from the pension fund, and where these investments are concerned, labor union officers are no longer labor leaders, but trustees with a

management function. Like other organizations such as the Carnegie Fund, and the Rockefeller Foundation, the union has found it highly desirable to make investments in certain high-grade common stock.

In this respect, he said:

> . . . We make our purchases of common stock for the primary purpose of receiving a reasonable return on our funds, realizing that there will be market fluctuations in the months and years to come. To say it another way, we are concerned about the stability of the income, more than we are concerned about changes in market prices. Our experience, like that of the trustees of your own pension funds, has been that a substantial higher return can be obtained from the investment in high-grade common stocks. Such purchases of equity securities will make it possible for our funds to participate in the future growth of the earnings of your companies. Which in our opinion makes this type of investment not only fully justified, but necessary, in any properly managed pension or trust fund.
>
> We, of course, endeavor to "dollar average" and use other recognized mediums of investment formulas, the same as your organizations.

THE labor leader then went on to explain the attitude his union takes toward participation, through stock ownership, in corporate management. In consideration of this attitude, Mr. Milne re-emphasized the distinction he had made between the function of the labor leader and that of the trustee of a pension fund. He said:

> . . . It is our definite policy to continue to represent the members of our organization to the best of our ability, and to protect and increase their funds in order to promote their security in their old age, and it is not our policy now, nor at any time, *to endeavor to interfere with management*. . . . We believe in private enterprise. We want private utilities to survive. We want to work with them and bargain with them without government interference. Thus the officers of our union, with our members united behind us, have in many instances joined our employers in fighting government encroachment in the utility field. We believe in private enterprise and the ability of businessmen to manage. With regard to abuses that is another story of course.
>
> As you well know, various members of our organization will obviously endeavor to protect the rights of our members, but it is not our policy to use our ownership of any of your stocks to force any action along such lines. *Any action on that front must be fully justified on its own merits.*
>
> Also, it is appropriate to say here, that if we make an investment in any company, which, in our opinion, ceases to continue proper and efficient management, except for unusual conditions, we will withdraw and treat this purely on its investment merits, rather than use it as a means of forcing an issue. . . . As stockholders, we are only interested in getting a fair return on our investments in order to build up our pension funds and keep faith with our members. We have no desire to interfere or participate further in corporation management.

Mr. Milne concluded his speech with the "sincere hope for the future" that labor and management would come to better understand each other.

Expanding Industry Investment Problems

THE statement of Benjamin F. Fairless, chairman of the board of the United States Steel Corporation, before the U. S. Senate Committee on Banking and Currency, on March 21, 1955, should make interesting reading to executives of the utility industry. While there are differences between steel and the public utility industries, there are some close analogies which are worthy of serious consideration, especially with respect to the heavy investments which both industries have to make in periods of inflation.

In stating his company's position as to the competition which it faces, Mr. Fairless said:

> Just as United States Steel must be able at all times to bid successfully for the consumer's dollar in the steel market, so it must also be able to bid successfully for the investor's dollar in the securities market.
>
> In the steel market, its products compete not only against those of more than 100 other important steel producers, but also against many other metals and material which are currently offered as substitutes for steel. And in the financial markets, the securities of United States Steel must compete against the offerings of every other enterprise and agency—both governmental and private—which is seeking the confidence and favor of the American investor.

The analogy to the utility industry here is direct. Not only must the utility industry raise its money in the open market and, relatively speaking, in much greater quantities than the steel industry, but it must also compete against other fuels and forms of energy. There is little, if any, of the so-called monopoly in the utility industry.

The need to serve the public at all times, the same as the utility industry does, was stressed by Mr. Fairless when he said:

> Steel, of course, is a basic essential not only of our national life but of our national defense. It is the obligation of the steel industry to meet the steel needs of this nation in peace or in war; and to anticipate, to the best of its ability, the future demands which will be made upon it by our growing economy. It has successfully met this obligation in the past; and it must always do so in the future.

THE heavy investment per unit of capacity, which is common in the utility industry, was pointed out by Mr. Fairless when he said that it costs today $300 to build a ton of fully integrated steel capacity. The current cost per kilowatt of system capacity (production, transmission, and distribution) is about the same in the electric utility industry.

As to the future rate of growth, Mr. Fairless said that the steel industry's ingot capacity would have to be increased from 126,000,000 tons, to 191,000,000 tons by 1980, or an increase of 52 per cent in twenty-five years. The historical rate of growth of the electric utility industry has been 100 per cent every ten years. While the rate of growth of the steel industry is slower, its annual depreciation requirements are heavier, based, as they are, on an average life expectancy of twenty-five years rather than the forty to forty-five years of the electric utilities.

Discussing the question of depreciation further, Mr. Fairless noted:

> In the past nine years, since the end of World War II, the steel industry has carried out the greatest expansion program in its history. It has enlarged its

ingot capacity by 34,000,000 tons; and during a part of this period it has been permitted to use the so-called "rapid amortization" provisions of the tax law on some of its facilities.

Yet in each of these nine years, on the average, it has had to spend *a third of a billion dollars* more than it was able to obtain through depreciation, depletion, and amortization. That is the amount of additional capital it has had to find every year—a third of a billion dollars! But at present-day construction costs, it will have to find nearly *twice* that much, each year for the next quarter-century, in order to keep pace with the foreseeable demands of this growing nation of ours.

As to the sources of this additional capital which is currently not being recovered through depreciation, Mr. Fairless said:

> There are only three possible sources, so far as I can see. It must come from a more realistic treatment of depreciation under the federal tax laws; or it must come from higher prices and larger profits to reinvest in the business; or it must come from the sale of stocks or bonds. Or it may, of course, come from a combination of all three.
>
> Looking back on the past, again, we find that the steel industry has consistently met a good part of its capital needs through the reinvestment of earnings; and presumably it will continue to do so—as it properly should, I believe. But we also find that it has not been able to rely upon that source alone, by any means.

While the utility industry is less dependent for its internal sources of cash on its depreciation accruals, the longer life of its property makes it more vulnerable to inflation and the consequent erosion of capital.

Mr. Fairless said that while the steel industry has been noted as a "feast or famine" enterprise, that statement applied only to the operating rate and not as far as profit was concerned. He said:

> Financially speaking, we have had our famines indeed, but never, in the past quarter-century, have we enjoyed a single year which remotely approached what might be termed a feast.
>
> For twenty-six years now, the National City Bank of New York has made an annual study of more than forty leading manufacturing industries, showing the profits of each as a percentage of net worth. And year after year—without even one single exception—the profits of the steel industry have been unfailingly below the average earned by all the rest. In five of these years, our industry had no profits at all—only losses. In half of these years, it never rose above sixth place from the *bottom* of the list. Only once did it ever manage to climb up into the first division, and then—at this pinnacle of its success—it stood twenty-first from the top.
>
> Yet, in many of these years, as you know, steel companies were breaking all production records in their plants and were turning out every pound of steel that they could pour, in order to meet all the military and civilian demands that were being made upon them.

While the electric utility industry has never been called a "feast or famine" operation, yet its income picture leaves a lot to be desired. In the nine years from 1945 through 1954, while both its kilowatt-hour output and its plant investment more than doubled, the return declined from 7.25 per

cent to 5.5 per cent or an incremental return of only 4.2 per cent during a period in which the country enjoyed tremendous growth and prosperity.

Managerial Zones of Reasonableness

THE term "zone of reasonableness" is one that is in common use in the field of public utility regulation, but until now its use has been almost wholly restricted to the determination of the allowable rate of return; *i.e.*, on the range of property values within which a commission, or court, intends to make a finding as to a rate base. In a recent paper, reprinted from *Economics and the Public Interest,* Laurence S. Knappen suggests that the concept of the "zone of reasonableness" could now be used as a working range for testing utility operations from the standpoint of allowable expenses, and a gauge of economical or efficient management performance.

"The rate of return is only one factor in the determination of a utility's total revenue requirement, and it is not by any means the largest factor," Dr. Knappen points out. "The others, as commonly listed, are: the rate base, the operating expenses, depreciation, and taxes. Any or all of these other factors could conceivably with good effect be subjected to a zone of reasonableness test—or zone of managerial discretion test—if a different term is desired."

Knappen recalls a statement of the U. S. Supreme Court in the Bluefield Case that the return "should be reasonably sufficient to assure confidence in the financial soundness of the utility, and should be adequate, *under efficient and economical management,* to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties." (Italics supplied by author.) The power of management to control these various key factors—namely, the level of the operating costs, depreciation, taxes, and the amount of property devoted to the utility service—will vary considerably from factor to factor. But Knappen believes that those factors within the scope of managerial control could well be subjected to a preliminary test as to whether the costs incurred fall within a zone of reasonableness that has been marked out by the commission having authority over the utility.

"EVEN as to those investment or expense items which are assumed to be beyond the control of company management, it should be revealing and useful to consider how far they may differ from the customary relationship to total investment or total expense, as measured by the experience of other utilities," Knappen states.

"It may well be found that they are by no means wholly divorced from managerial control."

Knappen recognizes that this zone of managerial discretion cannot properly be treated as an inflexible standard. Frequently there will be extenuating circumstances that will and should justify approval of amounts, percentages, or rates, as the case may be, that happen to fall outside the tentative zone. Nevertheless, just as has been true in the case of the rate of return, Knappen believes the adoption of such zones of reasonableness for various rate base (property) and expense factors should narrow the range within which such cost factors would customarily be approved.

The March of Events

Bill to Build Dam with Local Funds Entered

U. S. Representative Coon (Republican, Oregon) last month introduced legislation calling for prompt federal construction of the John Day dam on the Columbia river, but with local utilities or public agencies putting up practically all the cost.

Mr. Coon's bill, if approved, would establish a new pattern for paying for federal multipurpose dams. In effect, the government would be collecting in advance for the power to be produced there and using this money to pay most of the construction costs. The companies or public agencies putting up the money would be paid back later in power. This would differ from the present pattern where the federal government constructs a dam with federal funds and then gradually year by year collects for the power produced there.

Mr. Coon said his plan was a "simple, straightforward, businesslike proposal" designed to get the earliest possible construction of a project that will produce badly needed power and yet do it "without a burdensome outlay of money from the federal Treasury."

Arkansas

Gas Rate Hearing Set

The state public service commission has set May 23rd to begin hearings on an application for an industrial rate increase filed by Arkansas Louisiana Gas Company. The gas company seeks an increase amounting to about $4,300,000 annually for its approximately 60 large industrial consumers.

Commercial and domestic rates are not affected by the application.

The company began charging the higher rates on April 14th under a $1,250,000 bond posted with the commission to insure refunds to customers in the event of an unfavorable ruling.

Roughly one-fourth of the gas company's increased rates will be charged to Arkansas Power & Light Company, according to information filed with the commission. Also, the cost of gas used by the company at its power plants will be increased at an average of more than 30 per cent. Arkansas Power & Light has asked the state commission to determine whether Arkansas Lousiana's price increases are properly applicable, and to make a full study to determine that the gas rates are reasonable and nondiscriminatory.

California

PG&E Gets Rate Boost

PACIFIC GAS AND ELECTRIC COMPANY was granted an interim increase in natural gas rates recently, effective May 10th and amounting to $8,827,000 in gross annual revenues.

The increase, allowed by the state public utilities commission, was designed to offset higher rates effective April 15th on natural gas bought by PG&E from El Paso Natural Gas Company, and is subject to refund to customers if the Federal Power Commission fails to authorize the El Paso rate increase.

Of the total increase granted, $6,044,600 will be paid by residential, general commercial, and small industrial users, while the remaining $2,782,400 will be paid by large industrial users.

This was the second large increase granted the company within five months. On December 1, 1954, the commission authorized an increase totaling $7,250,000.

Delaware

Court Acts in Phone Rate Case

THE question of fixing telephone rates in the state was referred to the state public service commission by the state supreme court recently. The high state tribunal returned the Diamond State Telephone Company Case to the superior court with instructions that it be sent back to the commission for reconsideration in light of the supreme court's opinion.

Effect of the opinion was to direct the commission to give more consideration than it did originally to "reproduction cost depreciated" in arriving at its rates.

The action marked the fourth round in the rate case, which started in June, 1953, when the utility filed an application with the commission for a rate increase throughout the state. The commission held hearings and granted increases, 34 per cent of the amount requested by the utility. On appeal, the superior court decided that a higher schedule of rates should be put into effect. They are the ones still in effect.

Georgia

Natural Gas Rate Increase Approved

THE Atlanta Gas Light Company and the Gas Light Company of Columbus last month received temporary permission to increase their rates. The chairman of the state public service commission, which granted the increase, said it would amount to 15 per cent for Atlanta Gas and 11 per cent for the Columbus firm. This was said to be exactly equal the amount of increase the companies have to pay their supplier, Southern Natural Gas Company of Birmingham.

Southern Natural has been granted a temporary increase by the Federal Power Commission pending outcome of an application for a permanent rise in prices. If Southern Natural is denied an increase, the commission chairman said, it will have to make a refund to distributors and the Georgia companies will in turn have to make refunds to customers.

The Atlanta Gas increase would amount to about $3,000,000 annually.

Kentucky

Gas Rate Raise Authorized

THE state public service commission recently authorized the Bell-Knox Pipeline Company to increase wholesale gas rates by about $15,000 a year. The firm had asked the commission for raises totaling about $32,000 annually. It supplies the Pineville Gas Company and the Middlesboro Gas Company. Both had protested the proposed increase.

The commission order stated that gauges measuring gas sent to Middlesboro and Pineville had been found in error. If these were corrected, the order said, the wholesaler would realize an additional $16,796 in revenue a year from Middlesboro and $4,983 from Pineville.

New York

Gas Rate Increase Asked

THE Consolidated Edison Company of New York recently filed with the state public service commission, a petition to amend its present gas schedules. The company said the proposed changes were designed to improve the rate structure and would not increase its revenue at the present sales volume. The company wants the new rates to become effective May 19th. They would mean a possible increase of 10 cents in the minimum monthly rates for gas.

Under the proposed rates, residential users of manufactured or mixed gas will pay a minimum of $1.10 for the first 500 cubic feet or less. This is 10 cents higher than the present rate. Those who use natural gas also face the minimum charge of $1.10 for the first 250 cubic feet used. This also is a 10-cent increase. Commercial customers would have to pay the new minimum.

Pennsylvania

City Loses Gas Rate Plea

THE state superior court recently rejected the city of Pittsburgh's attempt to wipe out a $1,830,000 rate increase imposed by Equitable Gas Company last August.

In an order written by Presiding Judge Chester H. Rhodes, the court dismissed the city's appeal as "premature" and placed the costs on the city. The judge pointed out that the increase was allowed by the state public utility commission on a "temporary" basis and was still being considered by that body.

The company had asked for the rate hike to meet an increase in price charged by pipeline firms bringing the gas to the Pittsburgh district from the Southwest.

The increase amounts to 3.4 cents per thousand cubic feet or an average of 66 cents more per month for the company's 225,000 western Pennsylvania customers.

Wins Fare Adjustment

THE state public utility commission last month authorized Philadelphia Transportation Company to drop its cut-rate strip tickets and initiate a penny charge for a second transfer, effective immediately.

The revisions in the transit firm's fare structure will produce an estimated $1,291,000 in additional annual revenue.

Progress of Regulation

State May Not Regulate Minimum Natural Gas Wellhead Prices Subject to Federal Regulation

STATES may not fix a minimum price to be paid for natural gas, after its production and gathering has ended, by a company which transports the gas for resale in interstate commerce, according to the United States Supreme Court. It pointed out that in Phillips Petroleum Co. *v.* Wisconsin (1954) 347 US 672, 3 PUR3d 129, it had held that "such a sale and transportation cannot be regulated by a state but are subject to the exclusive regulation of the Federal Power Commission." The Phillips Case was held to control the present one.

Earlier decisions given in Cities Service Gas Co. *v.* Peerless Oil & Gas Co. (1950) 340 US 179, 87 PUR NS 41, and Phillips Petroleum Co. *v.* Oklahoma (1950) 340 US 190, 87 PUR NS 48, were held inapplicable because in those cases the court was "dealing with constitutional questions and not the construction of the Natural Gas Act." Mr. Justice Douglas dissented on ground that state regulation of price is permissible until the federal price regulation permitted by Phillips Petroleum Co. *v.* Wisconsin (1954) 347 US 672, 3 PUR3d 129, is imposed. *Natural Gas Pipeline Co. of America v. Panoma Corporation, Nos. 191, 321, April 11, 1955.*

Court's Temporary Rates Pending Commission Consideration of Additional Evidence Upheld

A LOWER Michigan court entered a decree authorizing a telephone company to collect temporary rates applied for, pending commission reconsideration of the remanded case. The action was taken when the commission refused to consider additional evidence which had been transmitted by the court.

The lower court's decree was not considered a usurpation of the commission's legislative function of rate making by the supreme court, since both the court and the commission had the responsibility of seeing that telephone rates were just.

Noting that, under a previous decision, the commission could not establish retroactive rates in order to correct injustice caused by delay in establishing rates in a proceeding, the high court commented that the commission should use every reasonable effort to eliminate unnecessary delay and to pass judgment on facts that would not only reflect upon the present but also upon a reasonable period in the future.

The commission should consider not only the cost of doing business, including interest and dividends, but also those factors which will influence yields for reasonable times in the future.

Services and rates of a utility, although related, are not wholly dependent upon each other in a proceeding. As to rates, the question is whether the company is receiving a just and reasonable return on the value of its existing property. As to adequate service, the question is whether the company is rendering, or is capable of rendering, reasonable service with its existing property, or whether by improvements, this can be done. Once having found that the telephone rates presently being charged were inadequate, the commission could not arbitrarily condition an increase in rates on an improvement in services and facilities. To do so, would have the effect of confiscating the utility's property. *General Teleph. Co. of Michigan v. Michigan Pub. Service Commission, 67 NW2d 882.*

Review of Rate Orders Limited to Points Raised before Commission

THE United States Supreme Court reversed a court of appeals decision on the ground that it exceeded its authority in reversing a Federal Power Commission rate reduction order. [See (1953) 3 PUR 3d 321, 209 F2d 717.] Judicial review of rate orders is limited to points actually raised and argued before the commission, according to the Supreme Court. The lower court had reinstated an expense item which the commission had disallowed.

Case History

Several years ago the commission instituted a rate investigation against the Colorado Interstate Gas Company. While this was pending the Canadian River Gas Company filed an application for authority to merge with Colorado. At that time it was proposed that the commission, in any natural gas rate proceeding, exclude losses incurred in gasoline operations from the company's cost of service for rate-making purposes. This condition was attached to the merger authorization. No review was sought and the merger was completed in 1951. The company has enjoyed its benefits since that time.

Subsequently the rate investigation was resumed, and the commission eliminated the losses from the company's gasoline operations as operating charges. As a result of the elimination a rate reduction was ordered. The company applied for a rehearing but failed to argue that elimination of the gasoline losses was improper. On appeal, however, the circuit court, on its own responsibility, held that, despite the action taken in the merger proceeding, the loss must be added to the company's cost of service. It, therefore, reversed the commission order and remanded the cause for further proceedings.

Scope of Review

The Supreme Court held that the lower court may not invalidate, on its own responsibility, an order of the commission which prohibits the inclusion of certain operating expenses of a natural gas company in its cost of service, where the order not only has been proposed and acquiesced in by the company but also has been imposed by the commission as a condition of a merger under which the company is operating.

The court pointed out that the Natural Gas Act prescribes exclusively the proce-

dure to be followed by any person seeking judicial review of a Federal Power Commission order. It limits the scope of that review to the questions raised below. To allow a court of appeals to intervene on its own motion would seriously undermine the purpose of the explicit requirements of the act that objections must first come before the commission. Furthermore, the Administrative Procedure Act also adheres to the principle requiring the exhaustion of administrative remedies before permitting court review.

The necessity for prior administrative consideration of an issue is apparent, the court said,

> . . . where, as here, its decision calls for the application of technical knowledge and experience not usually possessed by judges. The Federal Power Commission is a legislative agency the decisions of which involve those difficult problems of policy, accounting, economics, and special knowledge that go into public utility rate making. For reviewing a rate made by the Federal Power Commission, the court of appeals has no inherent suitability comparable to that which it has for reviewing the judicial decisions made by a United States district court.

The company suggested that to limit the judicial review of the court to those objections which have been urged specifically before the commission prevents that court from reviewing effectively the "end result" of the rate order. The court rejected that argument, saying that it would wipe out at a single stroke the expressly prescribed policy of § 19(b) of the Natural Gas Act. Not only would such acceptance be contrary to the terms of the statute, but it would fail to recognize the fundamental consideration that it is not the function of a court itself to engage in rate making.

Confiscatory Return

The court also rejected the company's charge that under the commission's allocation of gasoline costs and the condition requiring the company to absorb them, the rate of return was reduced from 5.75 per cent to 5.01 per cent and is, therefore, unreasonable and confiscatory. *Federal Power Commission v. Colorado Interstate Gas Co. No. 45, March 28, 1955.*

Electric Rate Contract with Transit Company Fair to General Consumers

A RATE contract for electric service to a transit company has been upheld by the District of Columbia commission as being fair not only to the contracting parties but also to other electric consumers. The agreement covered rates to be charged in lieu of rates proposed in the electric company's general rate increase application.

The agreed rates were the result of bona fide arm's-length bargaining to avoid the expenses involved in litigating the issues as to their fairness. In view of this fact, and the fact that such expenses as would have been borne by both utilities would have been passed on to the general consuming public, the commission found the avoidance of such litigation to be in the public interest and the rates to be just and reasonable as between the contracting parties.

Burden of Loss

To the extent that it might be assumed that the rate fixed by the agreement was less than that which would have been ar-

rived at in its absence, there would be the possibility that the public would be unjustly burdened if it were compelled to make up the difference. The commission held that, in entering into and proposing such an agreement, the electric company must assume this risk rather than impose it upon the public. The amount involved would be so small in relation to total revenues as not to affect the financial position of the electric company or its ability to render service. If the final decision in the general rate proceeding would result in such a differential, the commission would take appropriate action to insure that such loss would be absorbed by the electric company and not passed on to other consumers. *Re Potomac Electric Power Co. PUC No. 3502/13, Formal Case No. 438, Order No. 4156, January 18, 1955.*

Excess Depreciation Reserve Adjusted and Actual Capital Structure Recognized in Rate Case

THE city of Akron contended, in a rate proceeding brought by the Ohio Bell Telephone Company, that in computing the amount by which the depreciation reserve invested in plant exceeded actual existing depreciation, for the purpose of deducting such excess from the reproduction cost new rate base, the entire reserve should be ratioed to a reproduction cost new level.

The company countered that if the reserve was to be factored upward to a reproduction cost new valuation, then the depreciation expense must also be increased by the same factor because the larger reserve could be maintained only by the accrual of correspondingly greater annual depreciation reserve expense.

The Ohio commission concluded that neither party's claim was entirely valid. Noting that the entire depreciation reserve had been invested in property, the commission held that the value of the property purchased with such funds, to the extent that such value corresponded to the actual depreciation, should be included in the rate base.

The company was authorized to earn a return on the former, notwithstanding that the property had appreciated in value, but was not allowed to earn a return on the excess funds invested in property. The excess was deducted from the rate base in an amount by which such excess invested in plant was ratioed to the same appraisal level that the reproduction cost new of the property bore to the book value.

Accruals for the depreciation reserve by the company's predecessors were not deducted from the present reserve for the purpose of computing the excess, the commission stating that such accruals represented moneys collected as part of the cost of service and were invested in plant and property.

Amounts which the company had been previously ordered by the commission to post on its books, which represented reserve requirements of plant and property acquired from numerous small companies, were deducted from the reserve. The commission felt that such amounts simply represented aggregate bookkeeping accruals and not depreciation expense collected from ratepayers as a part of the cost of service.

Long-term Debt Ratio Not Imputed

The city contended that the company's income taxes should be adjusted downward and its income available for fixed charges increased by considering a portion

of its existing all-equity capital to be long-term debt.

The commission refused to accede, commenting that to consider income which the company did not receive by imputing an incurrence of indebtedness which it did not have, would be denying the company needed revenues and sooner or later force it to incur the debt. Moreover, to impute debt would violate the fundamental principle that in the absence of evidence of bad faith or recklessness, the commission would not set management decisions aside. The commission stated:

> Assumptions contrary to fact should not be made except upon a showing that they are clearly in the public interest. When it is considered that the present applicant is admittedly furnishing excellent service; that it paid off an inherited long-term debt by funds most of which were obtained by selling stock, and has an established policy of remaining as debt free as possible, this commission is all the more reluctant to depart from reality for the purpose of imputing to applicant income which it has not received.
>
> A business enterprise which has little or no debt is in a much sounder financial position than its counterpart which for one reason or another may have debt included in its financial structure. The commission believes that the assurance of a healthy financial condition of a public service company over the years is of more importance than the immediate income tax savings, since it is far from clear that debt is advantageous in the long run.

The company was authorized to increase its rates so as to produce a return of 5.94 per cent, which the commission considered reasonable. *Re Ohio Bell Teleph. Co. No. 24,517, December 30, 1954.*

Rate Advantages Justify Sale of Electric Plant

THE New York commission authorized a small electric company to sell its property and franchise in a portion of its territory to another electric company for the original cost of the plant being transferred less accrued depreciation. The area affected is surrounded on three sides by the purchasing electric company's service area.

The commission found that the sale would result in a reduction of about 15 per cent in the total bills paid by the few customers in the area. It would also result in several applicants for service being able to obtain service at cheaper rates, while avoiding the payment of very substantial extension costs. *Re Adams Electric Light Co. Case 17148, February 21, 1955.*

Other Important Rulings

Increased Gas Cost. The Tennessee commission allowed a gas company a rate increase of 2.5 per cent to permit recoupment of the increased cost of purchased gas, where the company's rates were not so high as to permit absorption of the increase and where it would permit the company to earn a reasonable return on its over-all investment. *Re Nashville Gas Co. Docket No. U-3611, February 23, 1955.*

Review of Tax Computation. The

United States district court, in reviewing a commission rate order, held that it had no authority to overrule the commission's methods for computing a transit company's income tax liability, as an operating expense, where such method was not prohibited by statute and had a rational basis. *Allied Civic Group, Inc. v. District of Columbia Pub. Utilities Commission, 125 F Supp 453.*

Financial Resources Not Shown. The California commission refused to grant a highway common carrier's request for additional operating authority where the carrier had failed to show sufficient financial resources. *Re Peninsula Motor Express, Decision No. 51061, Application No. 35367, February 1, 1955.*

Injunction against Rate Contract. The supreme court of Kansas upheld a lower court's refusal to enjoin performance of a contract for the wholesale sale of electricity generated outside the state, on the theory that the transaction encompassed by the contract constituted interstate commerce, and, as such, was exempt from state regulation. *Smith v. Sekan Electric Co-op. Asso., Inc. 279 P2d 309.*

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Return, § 101 — Natural gas.

4. A natural gas company was allowed a return of 6.44 per cent on its rate base, p. 134.

Reparation, § 17 — Wholesale gas rate reduction — Refund to customers.

5. A gas company receiving a rate increase to offset in part the increased cost of purchased natural gas was ordered to allocate proportionately among its customers any refund which it might receive when the wholesalers' rates were finally determined by the Federal Power Commission, p. 134.

APPEARANCES: Wilfrid O'Leary, Attorney at Law, Cheyenne; and Lee, Bryans, Kelly & Stansfield, Denver, Colorado, by Ralph Sargent, Jr., of counsel, appearing for petitioner, Cheyenne Light, Fuel and Power Company.

By the COMMISSION: On January 17, 1955, Cheyenne Light, Fuel and Power Company, hereinafter called the "company," filed with the commission, pursuant to Rule 11, Part II of its Rules, effective July 1, 1949, its petition for permission to file and place

in effect on one day's notice to the public, after the filing thereof, a rider to its tariff, Wyo. P.S.C. No. 2—Gas, to be designated and published as Original Sheet No. 11A of said tariff, increasing (a) all of its rates and charges for residential and commercial natural gas service in the amount of .894 cent per hundred cubic feet used per month, and (b) all of its rates for interruptible industrial natural gas service in the amount of 3.29 cents per thousand cubic feet used per month.

The proposed emergency natural gas rate adjustment, if allowed, will affect the following designated tariff sheets of the company now on file with and approved by the commission:

Residential and Commercial Natural Gas Service:

Wyo. P.S.C. No. 2, Third Revised Sheet No. 4
Wyo. P.S.C. No. 2, Third Revised Sheet No. 5
Wyo. P.S.C. No. 2, Fourth Revised Sheet No. 6

Interruptible Industrial Natural Gas Service:

Wyo. P.S.C. No. 2, Original Sheet No. 7
Wyo. P.S.C. No. 2, Second Revised Sheet No. 9

Pursuant to notice duly given in accordance with Rule 10 of the commission's rules of practice, said matter was heard by the commission, en banc, in its hearing room, Supreme Court and State Library building, Cheyenne, Wyoming, on February 4, 1955, at 9:30 o'clock A.M.; and the same was taken under advisement. The appearances entered of record at said hearing are set forth above.

Prior to said hearing date and on February 2, 1955, the city of Cheyenne, Wyoming, filed with the commission its Resolution No. 1054, adopted January 31, 1955, whereby it opposes generally the proposed increases in the rates and charges of the company for natural gas service furnished by it to consumers within said municipality; however, as shown above, said city was not represented at said hearing and no evidence was offered by it thereat in support of its said protest.

The commission now having duly considered said petition, the evidence of record, the statements and representations of counsel, and being fully advised in the premises, hereby enters its opinion, findings, and order herein, as follows:

Cheyenne Light, Fuel and Power Company is an operating "public utility" as said term is defined by § 64–101, Wyoming Compiled Statutes, 1945; and, as such, it is engaged in the business of generating and purchasing electric energy and the transmission, distribution, and sale thereof to the public within its certificated service area which includes the city of Cheyenne; the purchase, distribution, and sale of natural gas to the public within said municipality and the fringe area adjacent thereto; and the generation, distribution, and sale of steam for heating purposes to business establishments located in the main business area of said city.

The company is a Wyoming corporation; and, except for qualifying shares of stock held by the members of its board of directors, all of its outstanding capital stock is owned and held by the Public Service Company of Colorado, a public utility operating in the city of Denver and elsewhere within the state of Colorado. It purchases its entire supply of natural gas for resale, as well as so-called "boiler gas," which it uses as fuel in the

operation of its steam electric generating plant in Cheyenne, at various border stations in, and adjacent to said city from Colorado-Wyoming Gas Company, Denver, Colorado, an interstate pipeline company which is also a wholly owned subsidiary of the Public Service Company of Colorado. Colorado-Wyoming Gas Company, hereinafter called "Colorado-Wyoming," purchases substantially all of its natural gas requirements from Colorado Interstate Gas Company which is also an interstate pipeline company. Public Service Company of Colorado also owns approximately 15 per cent of the common stock of said latter pipeline company. Both of said pipeline companies are engaged in the transmission and sale of natural gas for resale in interstate commerce and, by reason thereof, they are subject to the jurisdiction of the Federal Power Commission.

The filing of the petition herein was precipitated by an interlocutory order issued by the Federal Power Commission in its Docket No. G–2720 on January 27, 1955, authorizing Colorado-Wyoming to place in effect, subject to refund, on February 1, 1955, increased rates and charges for natural gas furnished by it to its resale customers. This order authorized Colorado-Wyoming to place in effect on said date a revised tariff sheet increasing its demand charge from $1.53 per month per Mcf of billing demand to $2.38; and to increase its commodity charge from 17½ cents per Mcf of natural gas delivered to 21½ cents. The background of said FPC rate order is fully expanded in the petition of the company and the record in this proceeding and no useful purpose will be served by reiterating its history herein; however, it should be mentioned here that the increased rates which the Federal Power Commission thereby authorized Colorado-Wyoming to place in effect on the aforesaid date were predicated upon increased rates and charges which said regulatory body authorized Colorado Interstate Gas Company, its principal supplier, to place in effect on said date, by its intermediate order issued January 27, 1955, in its Docket No. G–2576, pending final determination of the rate proceedings initiated by said pipeline company therein. Said order provides that Colorado-Wyoming shall refund to those entitled thereto (petitioner) the portion of the increased rates and charges, thereby made effective on February 1, 1955, which the Federal Power Commission shall find not justified upon final determination of the rate proceeding in said docket (G–2720), with interest from the date of payment to Colorado-Wyoming; that it shall bear all costs of any such refunding; and that it shall execute and file with said commission an undertaking conditioned accordingly. We are bound by this order of the Federal Power Commission in determining the issues involved in this proceeding as said commission has exclusive jurisdiction over the rates and charges of Colorado-Wyoming for natural gas furnished by it to its retail customers, including petitioner herein.

The company requests that its proposed rate adjustment be made effective until such a time as the Federal Power Commission enters a final order in its Docket No. G–2720 with respect to the rate structure of its said sup-

plier, Colorado-Wyoming. It represents unto the commission that, at that time, it will review said proposed rate adjustment, file new rate schedules, and that it will pass on to its customers any refund received by it from Colorado-Wyoming in a manner to be approved by the commission.

The company alleges that, based upon the amount of natural gas purchased by it from Colorado-Wyoming during the calendar year 1954, the impact on it, resulting from the approved increased rates of the latter, effective February 1, 1955, will be that it will be required to expend $214,289 more annually for its supply of natural gas, i.e., the annual operating expense of its gas department will be increased by said amount. It contends that it can absorb only $726 or less than one per cent of said amount; and it has designed its proposed emergency rate adjustment so as to pass on the balance thereof ($213,563) or 99.66 per cent to its natural gas customers, i.e., same will increase the annual operating revenues of its gas department by said amount. The company points out that this proceeding is not a formal rate case; that the aforementioned rider is not designed to improve its net earnings or its financial position; and that all it is seeking by its petition herein is to increase its rates by an amount which will produce additional revenues sufficient to offset the major portion of the increased cost of its gas supply.

To substantiate its contention that it cannot absorb the entire amount of the increased cost of its gas supply and continue to earn a reasonable rate of return, the company offered three exhibits at said hearing; namely, balance sheet at December 31, 1954, and earnings statement for the calendar year 1954, and Exhibits Nos. 8 and 9 showing the actual operating results of the company as a whole for said year and what its operating results and those of its gas department would have been if its supplier's increased rates, its proposed rate adjustment, and other pro forma adjustments (wage increases effective July 1, 1954, and increased power cost during the year 1955) had been in effect during said period. Witness O. P. Reed, superintendent of the company, testified that the figures contained in Exhibit No. 7 and those in Exhibits Nos. 8 and 9 showing actual operations of the company and its gas department were taken from its books which were kept in accordance with accounting rules approved by the National Association of Railroad and Utilities Commissioners. These exhibits show that for the year 1954, the company as a whole earned a rate of return of 6.26 per cent on a net investment rate base and a rate of return of 4.30 per cent upon the operations of its gas department. They also show that if the company's proposed rate adjustment, its supplier's increased rates, and other necessary pro forma adjustments above referred to had been in effect throughout said year, the company would have earned a rate of return of 4.47 per cent on the operations of its gas department and a return of 5.93 per cent on its over-all operations. The actual operating results of the company as a whole and as proformed by it to reflect its pro-

posed rate adjustment, the increased cost of its gas supply and increases in other items of operating expense above mentioned follow:

	Actual	Pro Forma Adjustments	Pro Forma
Gross Operating Revenues	$2,876,542.45	$226,604.60	$3,103,147.05
Operating Revenue Deductions:			
Operating Expenses	$1,895,555.43	$258,212.08	$2,153,767.51
Maintenance and Repairs	192,835.56	.....	192,835.56
Depreciation and Amortization	149,827.82	.....	149,827.82
Taxes—Other Than Income Taxes	85,861.44	.....	85,861.44
Federal Income Taxes	240,000.00	(16,435.88)	223,564.12
Total	$2,564,080.25	$241,776.20	$2,805,856.45
Net Operating Revenues	$312,462.20	$(15,171.60)	$297,290.60
Interest During Construction	2,919.21	.....	2,919.21
Net Operating Earnings	$315,381.41	$(15,171.60)	$300,209.81
Property, Plant, and Equipment	$6,182,123.81	$	$6,182,123.81
Working Capital*	174,032.59	21,517.67	195,550.26
Materials and Supplies	163,036.16	.....	163,036.16
Gross Rate Base	$6,519,192.56	$21,517.67	$6,540,710.23
Net Property, Plant, and Equipment	$4,704,515.68	$	$4,704,515.68
Working Capital*	174,032.59	21,517.67	195,550.26
Materials and Supplies	163,036.16	.....	163,036.16
Net Rate Base	$5,041,584.43	$21,517.67	$5,063,102.10
Rate of Return			
Gross Rate Base	4.84%	.....	4.59%
Net Rate Base	6.26%	.....	5.93%

*1/12 Operating Expenses, exclusive of Taxes and Depreciation.

Witness Reed testified that if the company had been required to absorb the entire amount of the increased cost of its gas supply during the year 1954, its gas department would have sustained a loss of $16,982; and that its over-all rate of return would have been 4.13 per cent. Considering this testimony and the operating results of the company as shown by Exhibit No. 8, as proformed, it appears that it has made a prima facie showing that neither the company as a whole nor its gas department as a separate unit can safely absorb the total amount of the increased cost of its gas supply and continue to earn a reasonable rate of return on a net investment rate base.

[1, 2] We shall now consider what portion of the increased cost of the company's natural gas supply ($214,289) can be safely absorbed by it and the amount thereof which, in our opinion, it should be authorized to pass on to its consumers. According to the evidence, the company has included in its rate base the sum of $307,017.78 representing nonrefundable contributions in aid of construction. In Re Cokeville Radio & Electric Co. (1954) Docket No. 9267, 6 PUR3d 129, we held that a utility is not entitled to earn an income return on plant contributed by its customers and that the cost of such plant should be excluded from its rate base. Exhibit No. 7 shows that the company has collected from its customers line extension deposits in the amount of $87,393.94.

These funds are refundable. They have been used by the company to construct outside plant which is included in its rate base, i.e., plant in which it has no investment. In our opinion, it should not be entitled to earn an income return thereon until it has paid for such plant by refunding such deposits or otherwise. Following our ruling in Re Cokeville Radio & Electric Co., *supra,* we find that both of said items should be excluded from the company's rate base.

The company spent $192,835.56 for maintenance and repairs during the year ended 1954. The evidence shows that this figure exceeds a similar expenditure during the year 1953 by $81,700. Witness Reed testified that for the past few years, the maintenance program of the company "had been suffering" due to difficulties encountered by it in hiring trained personnel to perform this type of work. According to its annual reports, the company expended the following amounts for maintenance and repairs during the years 1950 through 1953:

Calendar Year	Amount
1950	$94,646.81
1951	75,221.46
1952	93,529.21
1953	111,101.44
Total	$374,498.92

In determining what part of the increased cost of the company's gas supply should be passed on to its customers, it appears to us that it is unfair to require them to pay accelerated maintenance and repair expense incurred by the company during the year 1954, even though the same may remain constant during the next two or three years, when a portion of such expenditure was for work that should have been performed by it during prior years. In our opinion, it would be more equitable to adjust the 1954 expenditure for such work to a figure equal to one-half of the sum of the 1954 expenditure and a figure representing the average of such expenditures for the past four years, for the purpose of testing the reasonableness of the company's proposed rate adjustment. The average amount which the company spent for maintenance and repairs during the past four years is the sum of $93,624.75. Adding this figure to the amount expended by it during 1954 ($192,835.56) and dividing the result by two, we find that said 1954 expenditure should be adjusted and reduced to the sum of $143,230.15. We further find that the amount of this adjustment ($49,605.41) should be deducted from the company's proposed pass-on ($213,563), i.e., the same should be reduced by said amount. The commission's pro forma of the actual operating results of the company reflecting the above-mentioned adjustments follows: [See next page.]

[3–5] Relating the net earnings of the company as shown by the commission's pro forma above set forth to the net investment rate base shown therein, we find that the company can safely absorb $50,331.41 or 23.49 per cent of the increased cost of its natural gas supply and still earn a rate of return, company-wise, of 6.44 per cent on such a rate base. We believe this determination is fair to all concerned and that the same lies within the realm of reasonableness. We accordingly find that the company's proposed rate adjustment should be denied; and that

	Actual	Commission's Pro Forma Adjustments	Commission's Pro Forma
Gross Operating Revenues	$2,876,542.45	$176,999.19	$3,053,541.64
Operating Revenue Deductions:			
Operating Expenses	$1,895,555.43	$258,212.08	$2,153,767.51
Maintenance and Repairs	192,835.56	(49,605.41)	143,230.15
Depreciation and Amortization	149,827.82	.....	149,827.82
Taxes—Other than Income Taxes	85,861.44	.....	85,861.44
	$2,324,080.25	$208,606.67	$2,532,686.92
Income before Federal Income Tax	$552,462.20	$(31,607.48)	$520,854.72
Federal Income Tax	240,000.00	(16,449.03)	223,550.97
Net Operating Revenues	$312,462.20	$(15,158.45)	$297,303.75
Interest During Construction	2,919.21	.....	2,919.21
Net Operating Earnings	$315,381.41	$(15,158.45)	$300,222.96
Net Property, Plant, and Equipment	$4,704,515.68	$(394,411.72)	$4,310,103.96
Working Capital	174,032.59	17,383.88	191,416.47
Materials and Supplies	163,036.16	.....	163,036.16
Rate Base	$5,041,584.43	$(377,027.84)	$4,664,556.59
Rate of Return	6.26%	.....	6.44%

it should be permitted to file with the commission for its approval a rider to its tariff, Wyo. P.S.C. No. 2—Gas, to be designated and published as Original Sheet No. 11A of said tariff, to become effective on one day's notice after the approval thereof, increasing its filed rates for natural gas furnished to all consumers by amounts which will produce additional operating revenues in the amount of $163,957.59 or 76.51 per cent of its proposed rate adjustment. As indicated above, the company assures us that it will pass on to its customers any refund received from its supplier, resulting from the final determination of the latter's rate structure by the Federal Power Commission. In order that there will be no misunderstanding, our order herein will direct the company to allocate any such refund proportionately among its customers; and we will retain jurisdiction herein for the purpose of entering such further orders in this proceeding with respect thereto, as we shall deem necessary and proper.

ORDER

It is therefore *ordered:*

1. That said petition of the company be and the same is hereby denied, in part;

2. That the company be and it hereby is authorized to file with the commission for its approval, in accordance with its rules, a rider to its tariff, Wyo. P.S.C. No. 2—Gas, to be designated and published as Original Sheet No. 11A thereof, to become effective on one day's notice to the public after the approval thereof, increasing its filed rates for natural gas furnished to all consumers by amounts which will produce additional operating revenues in the amount of $163,957.59;

3. That the company be and it hereby is *ordered* and directed to pass on proportionately to its customers any refund received by it from its supplier, Colorado-Wyoming Gas Company, after the latter's rates have been finally fixed and determined by the Federal Power Commission, in a man-

ner to be approved by the commission;

4. That jurisdiction of this proceeding be and the same is hereby retained by the commission and the within docket be and the same is hereby left open for the purpose of entering such further orders herein as may be deemed just, necessary, or proper in the premsies; and

5. That this order shall become effective as of the date hereof.

CALIFORNIA PUBLIC UTILITIES COMMISSION

Re Lucerne Water Company

Decision No. 51019, Application No. 35743
January 25, 1955

APPLICATION *by water company for authority to increase rates; increase authorized.*

Service, § 117 — Public utility — Duty to serve.

1. A company which has been granted the privilege of operating as a public utility has the fundamental duty of furnishing reasonable and adequate service to the public at reasonable rates without discrimination, p. 139.

Rates, § 130 — Service defect as a factor — Water company.

2. A small water company should be authorized to increase rates, notwithstanding serious service deficiencies, where the present return is very low and increased operating expenses will reduce it even further, p. 139.

Return, § 115 — Water company.

3. A return of 6.6 per cent was considered reasonable for a small water company, p. 139.

Security issues, § 58 — Financing improvements.

4. Authority to issue a note secured by a deed of trust should be granted to a small water company where the money, property, or labor to be procured or paid for through the issuance of such note is reasonably required by the company for the purpose of improving its system, p. 140.

APPEARANCES: Paul B. Strong, for applicants; Kermit W. Lucas, for Lucerne Recreation District, protestant; Frank E. Johnston, for Lucerne Hotel, interested party; John Donovan and E. Ronald Foster, for the commission staff.

By the COMMISSION: By the above-entitled application, filed August 27, 1954, Paul B. Strong and Sarah R. Strong (Lucerne Water Company) seek an order of this commission authorizing increased water rates for service rendered in the community of

Lucerne, Lake county, and authority to issue a note secured by a deed of trust.

A public hearing in the matter was held before examiner F. Everett Emerson on December 3, 1954, at Lucerne. Approximately seventy of applicants' customers were in attendance.

Position and Request of Applicants

Applicants aver that due to the ill health of Mr. Strong and the resulting inability to reside in Lucerne and care for the needs of the water system, they have for the past three years placed the water operation in the charge of a local manager. In August, 1954, the local manager served notice upon applicants that he would resign unless his salary were increased from $150 per month to $350 per month. Applicants have not been able to obtain other responsible managerial help and finally reached an agreement whereby the present manager would continue operating the system at a salary of $300 per month. Because of such situation and because of other increased costs of operation applicants seek authority to increase water rates.

The system serves approximately 225 customers and applicants' rate proposal is to obtain an additional $1 per month from each of them.

Applicants have financed their purchase of the system and certain major plant additions by means of three long-term notes. Two of the notes were issued without the authority of this commission and are therefore void. Nevertheless, applicants have a debt for which payment has been demanded by the holder of the notes. Applicants, after negotiations with the holder of the notes, seek to combine the indebtedness into one new note for $11,878.50 at 6 per cent interest.

Applicants' System

The source of water for this system is Clear Lake, from which water is drawn, by means of a centrifugal lift pump, through an 8-inch suction line extending about 500 feet into the lake. The water is then treated, chlorinated, passed through rapid sand filters, and boosted by large pumps into two reservoirs. The system contains about 40,000 feet of mains, varying in size from 1½ inches to 6 inches in nominal diameter, and serves approximately 56 flat-rate customers and 165 meter-rate customers.

Position of Protestant

The Lucerne Recreation District, on behalf of water users, opposes any increase in rates on the following grounds:

1. The new rates proposed would be unreasonably higher than the rates charged in neighboring communities by other water suppliers.

2. The proposed increase would further penalize present consumers for poor management of the system.

3. The quality of water is so poor that business establishments suffer loss of patronage and residential customers are at times unable to use the water. The value of the service does not justify increased rates.

4. The proposed increase is believed to have been sought only as retaliation for failure of the users to "buy out" the Strongs' system, since growth in number of consumers served should have offset any increases in expenses.

This same protestant had previously sought relief from service deficiencies

by means of this commission's "informal complaint" procedure and the entire file on such subject (File No. I.C. 67514) is a part of this record by reference.

Evidence Respecting Service

The evidence indicates that the system is suffering from neglect by the owners and from lack of local attention to the physical plant. Instances of low pressure, insufficient water, dirty water, and wasting of water due to leaky mains are numerous. One reservoir cannot be used, on order of the health department, until its roof is replaced. Both reservoirs have leaks or leaking valves, waste water, and provide, in their present condition, less than adequate storage. Such conditions were unknown to Mr. Strong, according to his testimony, because he had not been on the properties for several years and had no personal knowledge of the defects. The commission staff investigation disclosed the same and additional deficiencies and an excessive electric power bill resulting from the pumping of water to be wasted.

The record is clear that these deficiencies have existed over a period of years. Applicants' local manager attributes the lack of attention to the needs of the system to lack of funds with which to correct the defects He reported in September, 1953, however, that repairs to both reservoirs were then being undertaken at a cost of about $1,000. The evidence shows that no such work has been done.

No testimony respecting service deficiencies was controverted by applicants.

Results of Operations

Certain limited evidence respecting the results of operations was presented by applicants. Mr. Strong testified, however, that he is not familiar with the expenditures, never sees the system's bills, is unaware of such purchases as meters and pipe, and has no detailed familiarity with the books and accounts. He claims to be operating at a loss.

The commission staff, as is usual in these matters, undertook a complete investigation of applicants' operations. The financial results of operations, as determined during the course of the investigation, are summarized as follows:

Results of Operations

Item	Year 1953 Present Rates	Year 1954 Present Rates	Year 1954 Proposed Rates
Operating Revenues			
Flat Rates	$ 1,720	$ 1,662	$ 2,249
Meter Rates	6,222	6,462	8,292
Hydrants	150	150	150
Total Revenues	8,092	8,274	10,691
Operating Expenses Before Taxes and Depr.	5,852	6,027	6,027
Taxes	533	533	917
Depreciation	1,221	1,245	1,245
Total Op. Exps.	7,606	7,805	8,189
Net Revenue	486	469	2,502
Rate Base (Depreciated)	26,307	25,722	25,722
Rate of Return	1.8%	1.8%	9.7%

Such results of operations were determined prior to the setting of the manager's new salary. Giving full-year effect to such salary would increase the tabulated expenses by about $425 and would thereby indicate that the rate of return in 1954 under existing rates would approximate 0.5 per

cent and under applicant's proposed increased rates would approximate 8½ per cent.

It is apparent that applicants are earning little or no return under existing rates and present methods of operation. However, all operating expenses are being met and applicants have available about $1,300 per year, in the form of depreciation charges, for reinvestment in plant facilities. Such sum, if properly applied, should assist in alleviating the many service deficiencies by providing a constant source of funds for replacement of worn-out facilities.

Conclusions

[1] Applicants in seeking and being granted the privilege of operating as a public utility thereby covenanted with the state that they would perform their duties as a utility. One of these duties, a most fundamental one, is the furnishing of reasonable and adequate service to the public at reasonable rates without discrimination. As just compensation for the performance of such duty, the utility is entitled to an opportunity to earn a reasonable return upon the property lawfully devoted to the public in the furnishing of such service.

[2] Applicants are in need of and will be accorded rate relief. However, applicants will be required to correct the existing system deficiencies and to render that reasonable and adequate service which is the public's due.

[3] The rates to be authorized herein are predicated upon the faithful performance of the ordered improvements and the rendition of reasonable and adequate utility service. Such rates should produce gross annual revenues of approximately $10,380, an increase of about $2,100 or 25 per cent over revenues presently obtainable. Applicants are placed upon notice, however, that less than satisfactory performance may bring about a reopening of this proceeding with a view toward rescinding a part or all of the increases granted. On the evidence in this proceeding we find the following to be a reasonable estimate of the results of operations of this system, under the authorized rates and with the ordered improvements completed, for the normal year 1955:

Results of Operations, 1955, at Authorized Water Rates

Item	
Operating Revenues	$10,380
Operating Expenses	
Before Taxes and Depreciation	6,350
Taxes	850
Depreciation	1,325
Total Operating Expenses	8,525
Net Revenue	1,855
Rate Base (depreciated)	28,000
Rate of Return	6.6%

We find the above-indicated rate of return and rate base to be reasonable for purposes of this proceeding.

Applicants' system contains many "dead ends," yet has no provisions for flushing of the mains. Many of the instances of periods of muddy or dirty water may be attributed to such situation. Applicants will be required to institute a regular flushing program for the alleviation of these conditions and, further, to investigate and report upon the efficacy of its existing filter plant.

We find the present fire hydrant charge of 40 cents per hydrant per month to be unduly low. Such charge

will be increased. However, the new rate will be made effective July 1, 1955, the date by which adequate reservoir capacity may be assured.

Applicants supply a standby reserve of water storage for the sole use of a fire sprinkler system of a large hotel and for such special service have billed the hotel the sum of $25 per month over a period of years. Such charge is not now included in applicants' tariffs. Neither applicants nor the hotel management seem certain as to ownership of the facilities nor as to what, if any, contractual relationships exist. Such details seem to have been obscured or lost in the passage of time. However, the parties should reduce their present understanding to writing and, after completing negotiations relative thereto, applicants should seek the approval of this commission of the terms and conditions of the resulting contract.

[4] We find that applicants' request to consolidate their indebtedness into one note in the sum of $11,878.50 secured by a deed of trust should be granted and that the money, property, or labor to be procured or paid for through the issue of such note is reasonably required by applicants for the purposes specified herein and that such purposes are not, in whole or in part, chargeable to operating expenses or to income.

With respect to depreciation expense charges, applicants should use the methods of depreciation accrual and the composite rate shown in Table 7–A of Exhibit No. 4 [omitted herein] in this proceeding until such time as major changes in plant composition occur or a future review indicates that such accrual rate is inappropriate.

NEW YORK PUBLIC SERVICE COMMISSION

Re Long Island Lighting Company

Case 13236
January 31, 1955

REVIEW *by commission of electric company's rates and charges; company ordered to prepare new tariff schedules.*

Expenses, § 32 — Storm damage — Reserve to cover.

1. An electric company should be allowed to charge to operating expenses each year amounts which will create a reserve to take care of possible future storm damages, p. 141.

Rates, § 538 — Telephone — Tariff schedules — Uniformity of structure.

2. An electric company should file one tariff schedule for its entire territory for each of the major categories of service, where the past need for different rate zones and differentials for service to the same consumer groups have disappeared with the growth in the territory and the change in operating conditions, p. 142.

By the COMMISSION: The report of the examiner in this proceeding summarizes the evidence of record. There is contained therein a review of the rather protracted nature of this proceeding which was instituted by the commission in 1947 and which resulted in electric rate reductions in 1948, 1949, and 1951, followed by a partial restoration in 1953 of a portion of such reductions. The report also sets forth in detail financial statements for the period since 1950 and derives the indicated return from electric operations on the basis of actual results to 1953 and estimates for 1954. On the basis of such estimates it was anticipated that the rate of return would be slightly under 6 per cent.

Two matters of some importance to the fixing of proper rates are not reflected in the report because they occurred after the formal hearings in the proceeding were closed. One was a new depreciation study reported upon by the commission staff, and concurrently approved, which will have the effect of increasing somewhat the annual accruals that must be made to reflect the depreciation accruing each year in the property utilized to provide electric service. The events which had the most decided effect upon electric operations were the three disastrous hurricanes that occurred last year after the close of the formal record in this case. Actual results for 1954 indicate a return from electric operations of slightly more than 5½ per cent, the decline being caused primarily and almost entirely by the heavy hurricane costs which amounted to about one and one-half million dollars.

[1] The company has been given permission to charge to operating expenses each year amounts which will create a reserve to take care of possible future storm damages. Whether recent experience can be taken as a proper indication of greater frequency of storms or extent of storm damage will only be demonstrated by the future. It seems desirable, however, and to the interest of both consumers and company to average out such costs over a period of years in providing a reserve so that the yearly figures will not be distorted by as large an amount as appears in the 1954 operating expenses. If there have been changes in general weather conditions as have been suggested by some authorities, this will provide a means of meeting such changed conditions rather than to attempt to absorb in a single period of one calendar year the full impact of damage that can be caused by one disastrous storm. The reserve will have an upper limit, and the program will be altered to conform to actual future experience, so that in no event will there be any possibility of burdening the consumers with amounts in excess of those necessary to meet proper operating costs. One alternative would be the placing of all company electric transmission and distribution facilities underground. This, of course, would greatly minimize any wind damage but even underground facilities would be susceptible to other elements of storm damage such as lightning and flooding. There are certain areas where density of use justify and require the construction of underground facilities but to place all of the company's facilities underground

at current prices would inevitably lead to higher rates than those presently existing.

The developments which have occurred since the hearings in this proceeding, and by far the most important of these was the advent of the three hurricanes and the resultant aftermath, will necessitate some revisions of revenue levels. The general change in the total revenue level will not be of any great moment, and will be in the range of one to 2 per cent of the total annual revenues, so that the electric rate level for the entire company will still be below the level of 1947 when this proceeding began.

[2] There are, however, other changes that must be made in the tariff structure that will bring about increases for some consumers and decreases for others. This proceeding was broadened by the commission to study the possibilities of rate simplification. The present tariff structure with twenty service classifications, including six service classifications and seven zones for residential usage, is a relic of the past when more than one company was providing electric service in rather dissimilar territories. The need for different zones and differentials in rates for service to the same consumer groups has disappeared with the growth in the territory and the change in operating conditions. After thorough consideration of the various methods of bringing about the desired rate uniformity and tariff simplification, it is the judgment of the commission that, with the two exceptions of service from underground lines and seasonal service, there should be one tariff schedule for the entire territory for each of the major categories of service, residential, general or commercial, and industrial.

Under present rate schedules, there have been rate differentials between contiguous tariff zones, resulting in numerous instances where customers living on opposite sides of the street are paying different rates. A uniform rate will end this inequity, and as a result some customers will obtain reductions while neighbors will receive corresponding increases. This is necessarily true where the rates in each of the zones are changed to one uniform territory-wide rate. Customers now paying rates which approximate the average for the various tariff zones will be little affected, while those who have been paying more than the average will receive decreases and customers who for many years have been paying less than the average will receive increases.

The tariff schedules now under suspension were not devised to provide for territory-wide rates, and therefore cancellation of such tariff schedules will be directed. New tariff schedules to accomplish the objectives set forth herein will require rather detailed and highly technical studies which should be undertaken immediately by the staff of the company and checked by the commission staff so that such new tariff schedules to bring rate uniformity throughout the territory of the company can be filed in the near future for consideration by the commission.

UNITED STATES COURT OF APPEALS, FOURTH CIRCUIT

Appalachian Electric Power Company

v.

Federal Power Commission

No. 6835
218 F2d 773
January 5, 1955

APPEAL *from Federal Power Commission order excluding litigation expenses from actual legitimate original cost of power project; reversed. For commission decision, see (1954) 3 PUR3d 116; for commission decision on rehearing, see (1954) 3 PUR3d 121.*

Valuation, § 142 — Litigation expense — Avoidance of license requirements.

Costs incurred by a power company in unsuccessful litigation to resist and avoid compliance with license requirements of the Federal Power Act should be considered as part of the original cost of a power project.

Water, § 18 — Power project license — History of litigation.

Discussion of history of litigation over power company's need for license for hydroelectric power project on New river, p. 145.

Valuation, § 67 — Original cost — Items included.

Discussion of items which are properly included in the actual legitimate original cost of a power project, p. 148.

Valuation, § 142 — Litigation expense — Avoidance of license requirements.

Statement that costs incurred by a power company in unsuccessful litigation to resist and avoid compliance with the license requirements of the Federal Power Act should not be allowed as part of the original cost of the project if such expenses were imprudently made or made in bad faith, or were excessive, p. 151.

APPEARANCES: Raymond T. Jackson, Cleveland, Ohio (Alexander H. Hadden and Herbert B. Cohn, Cleveland, Ohio, on brief), for petitioner; Howard E. Wahrenbrock, Assistant General Counsel, Federal Power Commission, Washington, D. C. (Willard W. Gatchell, General Counsel, Theodore French, Washington, D. C., and Mary E. Burke, Attorneys, Federal Power Commission, on brief), for respondent.

Before Parker, CJ., Dobie, CJ., and Thomsen, DJ.

PARKER, CJ.: This is a petition to review and set aside an order of the Federal Power Commission [3 PUR3d 116] which directed the Appalachian Electric Power Company to eliminate items aggregating $524,-

002.47, representing litigation expense, from a statement of legitimate original cost, filed under § 4(b) of the Federal Power Act, 16 USCA § 797 (b). The statement, which contained items aggregating $10,229,708.74, represented expenditures made in connection with the creation of a power project in the New river near Radford, Virginia. No other items in the statement were contested. The contested items represented expenses incurred in litigation which involved the necessity of obtaining a license under the Federal Power Act, 16 USCA § 791a et seq. That litigation was before the Federal Power Commission, the United States district court for the western district of Virginia, this court and the Supreme Court of the United States. See Appalachian Electric Power Co. v. Smith (DC Va) PUR1933C 433, 4 F Supp 6, Id. (CCA4th 1933) 67 F2d 451, certiorari denied (1934) 291 US 674, 78 L ed 1063, 54 S Ct 458, and United States v. Appalachian Electric Power Co. (DC Va 1938) 23 F Supp 83, Id. (CCA4th 1939) 107 F2d 769, Id. (1940) 311 US 377, 36 PUR NS 129, 85 L ed 243, 61 S Ct 291.

There is no dispute as to the facts, as to the company's good faith in resorting to the litigation or as to the reasonableness of the legal expenses incurred. The litigation expenses were ordered stricken by the commission from the statement of legitimate cost on the ground that the litigation contributed nothing to the project but was an attempt, which failed, to avoid the necessity of taking a federal license. The commission recognized that the expenditures were properly made by the company in connection with the physical project which it was engaged in building, but refused to allow them to be incorporated along with the other costs of that project on the theory that the physical project was to be distinguished in some way from the project as licensed. The rationale of the commission's decision is contained in the following paragraph of its report [3 PUR3d 116, 117]:

"Such costs were costs of attempting to achieve an objective which was never realized. That objective was to bring into being and operate the physical project which was actually constructed, but to do so without its being subject to a standard license, so it could be operated free from the restrictions of the rate and recapture provisions, based on actual legitimate original cost, which the act makes mandatory for standard licenses. We assume that that objective, if realized, would have produced benefits to the company and its investors not produced by the licensed project. Those benefits were the object for which the company carried on the litigation, made these expenditures. But even if we assume, arguendo (and we do not pass on this question), that if the litigation had succeeded and as a result the objective had been realized, and that these costs might for some purposes be deemed to be properly capitalizable as costs of accomplishing that objective, it does not follow that the expenditures are capitalizable as cost of the *licensed* project we have to consider. The licensed project presumably cannot produce the benefits to the company and its investors for which the expenditures were made

The expenditures contributed nothing to the licensed project, to its capability, its productivity, or its profitableness."

That this was the sole basis of the decision is emphasized in the order denying the petition for rehearing, wherein the commission said [3 PUR 3d 121, 122]:

"As we sought to make clear in our order issued February 11, 1954, the expenditures for the New river litigation were incurred in an effort to benefit the ownership of the project by enabling it to construct, maintain, and operate the project without a license; they did not benefit, contribute anything to, or in any way enter into, the construction, operation, or maintenance of the licensed project, which was in fact brought into existence. Where that is true they cannot be capitalized as cost of that project."

The question thus presented is a pure question of law, i. e., whether, under the statute and the uncontroverted facts, the commission was justified in excluding litigation expense reasonably incurred by the owners in securing a determination of the question as to whether a federal license was required for the project. In other words, was the company entitled to treat litigation expense incurred in defending its right to develop its property in accordance with its own ideas, and against an asserted servitude, as a part of the cost of the property and hence a part of legitimate cost of the project, or must such expense be treated as a loss and as such charged against the earned surplus of the company? We think that the company was clearly entitled to treat it as a part of legitimate cost. Not only was it an expenditure to protect the property against a servitude being asserted against it, which was of doubtful validity, but it was an expenditure for litigation which was necessary to determine the status of the property with respect to conflicting rights of regulation by the state and federal governments. This becomes abundantly clear when consideration is given to the facts with respect to the acquisition of the property, the dispute as to the navigability of New river, and the history of the litigation in which the expenditures were made.

The property on which the dam was built was acquired for the development of water power by the New River Development Company, a corporate predecessor of the Appalachian Electric Power Co., long prior to the passage of the Federal Water Power Act of 1920. The development of the project began about the year 1908, when the New River Development Company began the purchase of land for water-power purposes, and by 1925 a considerable amount, estimated at between half and three quarters of a million dollars, had been invested in the property. The Federal Water Power Act of 1920 provided for the licensing by the commission of water-power projects in navigable streams or where the operation of such projects would affect the navigable capacity of any navigable waters of the United States. 16 USCA § 797(e). Although the New River Development Company denied that New river was a navigable stream or that the Radford project would affect the navigable capacity of any stream that was navigable, it filed with the commission on June 25, 1925, a declaration of intention to construct the

project, as allowed by § 23(b) of the act, 16 USCA § 817, in the hope that the commission would disclaim any jurisdiction in the premises and that this would aid in the financing of the project. Shortly thereafter, the Appalachian Electric Power Company, the petitioner here, acquired the investment that had been made in the project as the result of a corporate consolidation together with all rights under the declaration of intention filed on June 25th. The commission requested a report of the Chief of Army Engineers, who first reported that the New river was navigable but later filed a report finding that in its present condition it was not navigable and that navigation on the Kanawha, the only navigable stream which it was thought might be affected by the project, would not be affected by it.

The commission held a hearing on the matter on March 2, 1926, at which the only evidence offered was the report of the Chief of Engineers. Some time later, the company filed an application for a license on the commission's suggestion that this would expedite matters and could be withdrawn if it later developed that no license was required. In October of 1926 the District Engineer of the War Department held a hearing with respect to the matter. On June 1, 1927, the commission made a finding that the New river was not "navigable waters" within the definition of § 3 of the Federal Power Act of 1920, 16 USCA § 796, but that the project would affect the interests of interstate and foreign commerce within the meaning of § 23 of the act. On July 1, 1927, the commission tendered a standard form license, which the company refused, in April, 1928, principally on the ground that the conditions—especially those concerning rates, accounts, and eventual acquisition—were unrelated to navigation.

The action of the company in refusing a standard form license in 1928 was taken after it had sought and obtained the advice of Hon. Charles E. Hughes, who at that time was engaged in the practice of law, to the effect that the commission was without power to require of the company a standard form license and that the most that could be required of it was a minor part license under § 10(i) of the act, 16 USCA § 803(i), conditioned upon the operation of the project in such way as not to interfere with the navigability of the Kanawha. By this time, officers of the state of Virginia were manifesting an interest in the matter and were asserting that, as the New river was not navigable, the right of regulation was in the state of Virginia, and not in the federal government, and that the requirement of a license of the company imposing any condition other than not to interfere with navigation by the operation of the project would constitute an infringement upon the sovereignty of the state. The questions thus raised as to jurisdiction, coupled with doubts as to the economic feasibility of the project if a license should be required, caused the company to refrain from going forward with construction at that time.

In February, 1930, respondent reiterated that its project was not within the commission's jurisdiction, but nevertheless offered to accept a "minor-part" license containing only such conditions as would protect the in-

terest of the United States in navigation. In September, 1930, on a question submitted by the commission stating that the New river was neither navigated nor navigable in fact, Attorney General Mitchell advised the commission that it could properly issue such a minor-part license. On November 25th, the commission "declined to take action on the application favorable or adverse," on the ground that a court adjudication was desirable. After the establishment of the commission as an independent agency, it held another hearing in February, 1931, and in April denied the application for a minor-part license, directed that the respondent be tendered a standard form license under the act, and ordered it not to proceed without such a license. A minority of the commission then favored a finding that the New river was navigable; the majority, however, thought that that question was for the courts and that the commission's jurisdiction was properly based, under § 23 of the act, on the effect that the project would have on commerce.

At the time of entering the order of April, 1931, members of the commission had indicated to officials of the company that it was desirable that the questions which had been raised as to the power of the commission to require the license be settled by court decision; and the company accordingly instituted the first of the suits above mentioned against the members of the commission which was ordered dismissed by this court for lack of jurisdiction (CCA4th 1933) 67 F2d 451, and the Supreme Court denied certiorari on February 19, 1934. 291 US 674, 78 L ed 1063, 54 S Ct 458. In order to obtain a judicial decision on the questions involved, the company, thereupon, notified the commission that it would proceed with the project without obtaining a license and began token construction as the basis for a suit by the government, which was commenced shortly thereafter and is the second suit referred to above. This suit was decided against the contentions of the government in the district court and by a majority of this court, over the dissent of the writer of this opinion; but the position of the government was sustained in the Supreme Court, with Chief Justice Hughes abstaining and two of the justices dissenting, on the ground that New river was navigable and that a standard license could be required as a condition of the construction of the project. That decision was rendered in 1940. In the meantime the company, as a result of changed economic conditions, had gone forward with the project and it has put in commercial operation a short time before the litigation was ended.

Under the circumstances, which we have thus narrated at some length, we think there can be no question but that the proper expenses of the litigation should be treated, not as a general loss chargeable against earned surplus, but as an expense incurred in defending and perfecting the title to property necessary to the development of the project. The fact that the litigation was not successful is no reason for not capitalizing its necessary cost as a part of the cost to the company of the property involved. The government was asserting rights with respect to the property which, if sus-

tained, would greatly impair its value. The company had the best of reasons for thinking that these rights were not well founded. In addition to the report of the Chief of Engineers that New river was not navigable, it had the opinion of one of the greatest lawyers of the country that the company could not be required to take the standard form license to which it was objecting and knew that the Attorney General of the United States had given an opinion that, upon the facts stated by the commission, the United States had no power to prevent the construction of the proposed project unless its operation would tend to impair the navigability of the Kanawha and for that reason had recommended the issuance of a minor part license. In addition to this, the state of Virginia was asserting conflicting rights. In this posture of affairs it was not only wise but necessary that a court decision be obtained to set these questions at rest; and there is no reason why the cost of such proceedings should not be treated as a part of the cost of the property to which they related. It is no answer to say, as does the commission, that the litigation was for the purpose of avoiding a license and that the only cost allowed by the statute is the cost of a licensed project. The litigation was unquestionably undertaken for the benefit of the project which was ultimately licensed, and the costs of that litigation were a part of the legitimate costs of bringing that project into being. Any businessman would so regard them, any purchaser of the project would so regard them, and there is nothing in the statute which requires that they be treated in any other manner. In the applicable section of the act, 4(b), 16 USCA § 797(b), the commission is authorized and empowered:

"(b) To determine the actual legitimate original cost of and the net investment in a licensed project, and to aid the commission in such determinations, each licensee shall, upon oath, within a reasonable period of time to be fixed by the commission, after the construction of the original project or any addition thereto or betterment thereof, file with the commission in such detail as the commission may require, a statement in duplicate showing the actual legitimate original cost of construction of such project, addition, or betterment, and of the price paid for water rights, rights of way, lands, or interest in lands."

"Net investment" as used in the foregoing section is defined in § 3(13) of the act, 16 USCA § 796(13), by reference to classification under the Interstate Commerce Act, as follows:

"(13) 'net investment' in a project means the actual legitimate original cost thereof as defined and interpreted in the 'classification of investment in road and equipment of steam roads, issue of 1914, Interstate Commerce Commission,' . . . . The term 'cost' shall include, in so far as applicable, the elements thereof prescribed in said classification, but shall not include expenditures from funds obtained through donations by states, municipalities, individuals, or others, and said classification of investment of the Interstate Commerce Commission shall in so far as applicable be published and promulgated as a part of the rules and regulations of the commission."

Pursuant to the statutory duty im-

posed upon it by the foregoing section, the commission promulgated the I.C.C. classification as Appendix II to its official publication entitled "Uniform System of Accounts Prescribed for Public Utilities and Licensees" and under the heading "Applicability of System of Accounts," stated: "In accordance with the requirements of § 3 of the act, the 'classification of investment in road and equipment of steam roads, issue of 1914, Interstate Commerce Commission,' is published and promulgated as a part of the accounting rules and regulations of the commission, and a copy thereof is appended hereto as Appendix II. Irrespective of any rules and regulations contained in this system of accounts, the cost of original projects licensed under the act, . . . shall be determined under the rules and principles as defined and interpreted in said classification of the Interstate Commerce Commission so far as applicable."

In the general instructions at the beginning of the I.C.C. classification under the heading "Items to be Charged" it is stated "Construction includes *all processes connected with* the acquisition and construction of original road and equipment, road extensions, additions, and betterments." (Italics supplied.) Elements of cost prescribed in relevant accounts of the I.C.C. classification include under the heading "General Expenditures" an item as follows: "73. *Law.* This account shall include specific and distinct expenditures not provided for elsewhere, for law service *in connection with* the acquisition of new road, road extensions, additions, and betterments, such as pay and expenses of counsel, solicitors, and attorneys, their clerks and attendants, and expenses of their offices." (Italics supplied.) Item 77 is as follows: "77. Other Expenditures—General. This account shall include all expenditures of a special and incidental nature in connection with the acquisition and construction of original road . . . which can not properly be included in any other account in this classification."

The expenditures here in question were unquestionably made in connection with the construction of the Radford dam and fall within the letter as well as the spirit of these regulations. They were made, not with respect to any other property or project, but with respect to this property alone; and they were made not only in an attempt to free the property from a servitude asserted by officers of the government which would greatly decrease its value as a water-power project, but also for the purpose of settling a controversy which had arisen as to conflicting rights of the state and federal governments to control and regulate the project being constructed. This seems so clear that we think that nothing would be gained by an analysis of decisions made by the commission in somewhat analogous cases. It might be noted, however, that, in Re Lexington Water Power Company (1937) 1 FPC 430, 454, 477, cost of unexercised options and of a legal opinion as to the applicability of the Federal Water Power Act were held to be proper elements of costs. In Re Safe Harbor Water Power Corp. (1937) 1 FPC 367, 369, 370, loss on sale of lands purchased for quarrying operations but not used on the proj-

ect were held proper. In Re Southern Industries & Utilities (1935) 1 FPC 219, 226, legal fees to protect the company's rights before Congress, the War Department, the T.V.A., the commission and the courts were held proper. In Re Susquehanna Power Co. (1944) 4 FPC 74, 113, 125, 54 PUR NS 418, $170,000 for legal services in presenting a proposed corporate structure to state commissions was sustained, as was the cost of an experimental and abandoned communications system. In Re Puget Sound Power & Light Co. (1942) 3 FPC 231, 242, 45 PUR NS 237, loss sustained as a result of a bank failure was held proper. In Re Minnesota Power & Light Co. (1948) 7 FPC 98, 77 PUR NS 253, (1950) 9 FPC 472, expenditures, including legal fees, in connection with reinforcing railroad bridge piers, for which it later turned out the licensee was not liable, were held proper. If the legal services here had been rendered in unsuccessful litigation with an upstream power plant with respect to the height of the company's dam, no one would contend, we think, that the expense would not be chargeable against the project as a capital expenditure, even though it resulted in no contribution to construction, operation, or maintenance. It can make no difference that the unsuccessful services were rendered in a contest with the government rather than with a private individual.

The commission stresses the case of Re Pennsylvania Power & Light Co. (1942) 3 FPC 89, 116, 117, affirmed sub nom. Pennsylvania Power & Light Co. v. Federal Power Commission (CCA3d 1943) 52 PUR NS 275, 139 F2d 445, certiorari denied (1944) 321 US 798, 88 L ed 1086, 64 S Ct 938, in which one of the items disallowed was loss arising from the sale of surplus flow line bands and shoes bought for the project but not used as result of mistake in construction. Without passing upon the question there involved, we think it is perfectly clear that the decision there throws little light on the question here, where we are dealing with legal services which related to the project as constructed and which were necessary to a defense of the property against an asserted servitude reasonably thought not to be justified and necessary also to secure judicial determination of questions, vital to the construction of the project, as to conflicting rights of control as between the state and federal governments.

The commission relies also upon the case of Pennsylvania Water & Power Co. (1949) 8 FPC 1, 53, 54, affirmed sub nom. Pennsylvania Water & Power Co. v. Federal Power Commission (1951) 89 US App DC 235, 94 PUR NS 175, 193 F2d 230, 243, Id. (1952) 343 US 414, 94 PUR NS 1, 96 L ed 1042, 72 S Ct 843, in which certain legal expenses were excluded in determining the rate base for rate-making purposes. As said by the court of appeals, however, these were properly excluded from the rate base because they had already been recovered by investors in the form of operating expenses and depreciation reserve. Here, the expenditures had not been recovered as operating expenses or otherwise. They were made during the process of construction and are properly considered as capital expenditures and not as cost of opera-

tion. A similar question arises with respect to the treatment of legal expenses in tax cases, where the rule is that if such expenses are incurred in developing or improving property, they constitute a part of the cost of the property and are not deductible as expenses. Garrett v. Crenshaw (CA 4th 1952) 196 F2d 185; Bowers v. Lumpkin (CCA4th 1944) 140 F2d 927, 151 ALR 1336; Bush Terminal Buildings Co. v. Commissioner of Internal Revenue (CA2d 1953) 204 F2d 575, certiorari denied (1953) 346 US 856, 98 L ed 370, 74 S Ct 72. If the company here had sought in its tax returns to deduct the costs of litigation here involved as a loss or as a current business expense, it would have been met with the answer that the amount so expended was not a loss but an investment in the project which the company was building. Such an answer would have been sound for the purposes of the taxing statutes. We think it equally sound for the purposes of the statutes here under consideration.

Argument is made that, since legitimate cost under the statute is computed as a basis for rate making or purchase by the public, expenditures made in the course of such litigation as was here involved should not be included. If, however, such expenses constitute, as they unquestionably do, a part of the cost of the project to the owner, there is no reason why they should not be included in cost for rate making, acquisition by the public, or any other purpose. Of course, if they had been imprudently made or had not been made in good faith or had been excessive in amount, they should not be allowed; but they are not attacked on any of these grounds. On the contrary, the commission concedes, as we understand, that they were prudent, proper, and not excessive and that they would be capitalizable as a part of the cost of the project for all purposes except the purposes of the statute here under consideration. We think they are capitalizable for that purpose also. If the valuation should ever become important for the purposes of purchase or rate making it will be because the company's investment in the property is less than its fair value, for the lowest of these must be taken under the statute; and if rate making or purchase is to be based on investment in property which is lower than its fair value, it is but fair and honest that all of the investment which the owner has made in the property be considered.

For the reasons stated, the order directing the company to eliminate the litigation expenses amounting to $524,002.47 from its statement of cost will be reversed and set aside and the company will be permitted to restore these expenses to its statement.

Reversed.

UNITED STATES SUPREME COURT

Securities and Exchange Commission

v.

Drexel & Company

No. 153
— US —, 99 L ed —, 75 S Ct 386
February 28, 1955

REVIEW *of judgment ruling that the Securities and Exchange Commission lacked jurisdiction over fees paid by holding company in proceeding involving reorganization of its subsidiary; reversed. For lower court case, see (CA2d 1954) 210 F2d 585.*

Corporations, § 10 — Federal commission jurisdiction — Fees and expenses — Reorganization.

The Securities and Exchange Commission has jurisdiction over the fees to be paid by a holding company to an investment banking firm employed by it to assist it in proceedings involving reorganization of its subsidiary under § 11(e) of the Holding Company Act, 15 USCA § 79k(e), even though the consolidated order approving not only the reorganization of the subsidiary under § 11(e) but also related transactions to be consummated by the holding company under §§ 10 and 12 of the act, 15 USCA §§ 79j, 79*l*, reserved jurisdiction only over fees and expenses with respect to the subsidiary's plan, and with transactions incident thereto.

Consolidation, merger, and sale, § 17 — Federal commission approval — Exchange of stock.

Statement that holding company's exchange of its securities for new securities pursuant to the reorganization of its subsidiary under § 11(e) of the Holding Company Act, 15 USCA § 79k(e), constitutes a "sale" under the act requiring approval of the Securities and Exchange Commission, and its acquisition of the new securities constitutes an "acquisition" within the meaning of the act and subject to the jurisdiction of the commission, p. 153.

Corporations, § 24 — Fees and expenses — Holding company reorganization.

Statement that the amount of fees for services rendered in a holding company reorganization proceeding is relevant to the question whether the reorganization plan is fair and equitable, p. 156.

Corporations, § 24 — Fees and expenses — Holding company reorganization.

Statement that payment of excessive fees was one of the historic abuses of the reorganization procedure, whereby utility companies were milked, an abuse the Holding Company Act sought to correct, p. 156.

(FRANKFURTER and BURTON, JJ., dissent.)

APPEARANCES: William H. Timbers, of Washington, D. C., argued the cause for petitioner; Arthur H. Dean, of New York city, argued the cause for respondent.

Mr. Justice DOUGLAS delivered the opinion of the court: The question in the case is whether the Securities and Exchange Commission has jurisdiction to pass on a fee to be paid by Electric Bond & Share Co. to Drexel & Co. in connection with a reorganization plan filed by its subsidiary, Electric Power & Light Corp., under § 11 (e) of the Public Utility Holding Company Act of 1935, 49 Stat 803, 15 USCA § 79a et seq. We hold that the commission does have jurisdiction.

The problem arises out of the unraveling and reorganization of the vast empire of Bond & Share, pursuant to the command of the act. The present case is one of several phases of the various reorganization plans adopted to bring the system into compliance.[1] The instant phase of this system's reorganization grew out of the filing of a voluntary plan of reorganization under § 11(e) by Electric.

Electric owned operating subsidiaries in several states and in Mexico. The plan provided that (1) Electric would transfer to a new holding company, Middle South Utilities, Inc., its holdings in those operating subsidiaries, as well as certain other assets; (2) preferred stocks of Electric would be retired by distributing to those security holders shares of Middle South and shares of another subsidiary of Electric; (3) the remaining shares of Middle South and the other subsidiary would be distributed to the holders of the common stock and of the warrants of Electric; and (4) Bond & Share would pay Electric $2,200,000 in settlement of intrasystem claims.

The plan filed by Electric under § 11(e) required Bond & Share to do three things: *first,* sell or exchange its holdings of Electric stock; *second,* acquire in exchange the shares of Middle South and the other subsidiary; and *third,* pay the cash amount in settlement of the intrasystem claims. It was not sufficient for Bond & Share that Electric get approval for its plan under § 11(e). It was also necessary by the terms of the act that Bond & Share also get the commission's approval of the steps required of it.

Bond & Share's exchange of its securities for the new securities was a "sale" under the act, for "sale" includes "exchange." Section 2(a)(23), 15 USCA § 79b(a)(23). Bond & Share is a registered holding company. No "sale" of securities can be made by a registered holding company without commission approval. That is the command of § 12 of the act, 15 USCA § 79*l*.[2] That approval

[1] For various phases of the reorganization of this holding company system see: (1) Re Electric Bond & Share Co. (1941) 9 SEC 978; id. (1942) 12 SEC 392; id. (1945) 20 SEC 615; id. (1945) 21 SEC 143, 61 PUR NS 412; id. (1946) 22 SEC 866; (2) Re Electric Bond & Share Co. (1942) 11 SEC 1146, 46 PUR NS 321, affd sub nom. American Power & Light Co. v. Securities and Exchange Commission (CA1st 1944) 53 PUR NS 16, 141 F2d 606; (1946) 329 US 90, 66 PUR NS 33, 91 L ed 103, 67 S Ct 133; Re American Power & Light Co. (1945) 21 SEC 191, 61 PUR NS 129; (3) Re United Gas Corp. (1944) 16 SEC 531, affd sub nom. Re United Gas Corp. (DC Del 1944) 59 PUR NS 372, 58 F Supp 501; (CCA 3d 1947) 162 F2d 409; and (4) Re Electric Bond & Share Co. (1945) 20 SEC 786, 61 PUR NS 287.

[2] Section 12(d) provides:

"It shall be unlawful for any registered

is obtained, as § 12 shows,[3] by a procedure which submits the fees in connection with the sale to the scrutiny and approval of the commission.

Bond & Share's receipt of the new securities was an "acquisition" within the meaning of the act. Section 2(a)(22). That "acquisition" was made subject to the jurisdiction of the commission by § 9(a), 15 USCA § 79i(a).[4] That approval could be had only by submitting the "acquisition" to the commission's scrutiny pursuant to § 10 of the act, 15 USCA § 79j, a scrutiny that includes supervision of the fees paid by the holding company in connection with the "acquisition."[5]

Bond & Share's cash payment in settlement of the intrasystem claim was incident to the "sale" under § 12 and the "acquisition" under § 10. And, as noted, all three transactions by Bond & Share were parts of the plan filed by Electric under § 11(e).

Bond & Share, therefore, filed an application pursuant to §§ 10, 11, and 12 of the act, asking for the commission's approval of the transactions which the plan required of it.

The commission consolidated the proceedings involving Electric's plan and Bond & Share's application and heard them together, and on March 7, 1949, entered one order in the consolidated proceedings, approving both. As respects Bond & Share the order said, "It is *further ordered* that the application-declaration of Bond & Share referred to above be and it is hereby granted and permitted to become effective." As respects the plan of Electric, the commission in the same order gave its approval, subject to additional terms and conditions, the second of which reads:

"That jurisdiction be and hereby is specifically reserved to determine the reasonableness and appropriate allocation of all fees and expenses and other remuneration incurred or to be incurred in connection with the said Plan, as amended, and the transactions incident thereto, other than the fairness and reasonableness of the fees and expenses incident to the stockholders' actions enumerated in Part II of the Plan, as amended."

It is said, however, that that reservation was "the reservation of the fees in connection with Electric's plan under § 11, and cannot be made to supply the failure to fix or to reserve

holding company, by use of the mails or any means or instrumentality of interstate commerce, or otherwise, to sell any security which it owns of any public-utility company, or any utility assets, in contravention of such rules and regulations or orders regarding the consideration to be received for such sale, maintenance of competitive conditions, fees and commissions, accounts, disclosure of interest, and similar matters as the commission deems necessary or appropriate in the public interest or for the protection of investors or consumers or to prevent the circumvention of the provisions of this title or the rules, regulations, or orders thereunder."

[3] *Supra*, note 2.

[4] Section 9(a) provides in relevant part:

"Unless the acquisition has been approved by the commission under § 10, it shall be unlawful—

"(1) for any registered holding company or any subsidiary company thereof, by use of the mails or any means or instrumentality of interstate commerce, or otherwise, to acquire, directly or indirectly, any securities or utility assets or any other interest in any business; . . . ."

[5] Section 10(b) provides in relevant part:

"If the requirements of subsection (f) are satisfied, the commission shall approve the acquisition unless the commission finds that—

. . . . . .

"(2) in case of the acquisition of securities or utility assets, the consideration, including all fees, commissions, and other remuneration, to whomsoever paid, to be given, directly or indirectly, in connection with such acquisition is not reasonable or does not bear a fair relation to the sums invested in or the earning capacity of the utility assets to be acquired or the utility assets underlying the securities to be acquired; . . . ."

the matter of fees in the proceedings under §§ 10 and 12 in relation to which they were incurred."

There are two answers to that argument. First, the reservation was made in the § 10 and § 12 proceedings for they were consolidated with the § 11 proceedings and one order entered in all three. Second, the order in the consolidated proceedings reserved jurisdiction over the fees and expenses incurred not only "in connection with the said Plan" but also in connection with "the transactions incident thereto." The latter obviously included the matters under § 10 and § 12, for they were the chief collateral ones before the commission at the time. The parties so understood it, for Bond & Share and Drexel filed petitions for approval of the Drexel fee, invoking the reserved jurisdiction of the commission. The commission held hearings and fixed a fee for Drexel[6] which neither Drexel nor Bond & Share thought adequate.[7] The commission applied to the district court for approval of this and other fee and expense orders. The district court approved. The court of appeals affirmed, except for the order as to Drexel; and as to that it reversed "for lack of jurisdiction in the commission." (CA 2d 1954) 210 F2d 585.

We see no such infirmity in the commission's order. The commission plainly has power under § 10 and under § 12 to fix the fees payable by Bond & Share. To be sure, the commission did not fix any fee, when on March 7, 1949, it entered the consolidated order approving the applications under §§ 10, 11, and 12. That order merely reserved jurisdiction to determine the reasonableness of the fees. There is a suggestion that no reservation of jurisdiction over the fees is possible, at least so far as § 10 is concerned, since § 10 directs the commission to approve the plan unless it finds the fees unreasonable. But the reservation by the commission of jurisdiction over the fees is merely a means of assuring that they will not be unreasonable. Certainly, the commission need not hold an entire plan in abeyance until it completes hearings on the fees to be paid in connection with one phase of it. We see no reason why the commission, in the interest of orderly administration, cannot defer consideration of all the fees, until it has time to view the entire matter in perspective and evaluate the worth of each contribution. We would have to read the act with an extremely hostile eye to deny the commission that administrative leeway.

The error of the court of appeals was in overlooking the essential and critical rôle that §§ 10 and 12 play in the case and in relying on § 11(e) alone.

The contrast between §§ 11(e) and 11(f) is plain, so far as jurisdiction over fees is concerned. Section 11

[6] Bond & Share asked that it be reimbursed by Electric for this fee. The commission denied reimbursement, saying that Bond & Share's services in the proceedings "were not services merely designated to bring Electric into compliance with the commission's order but were additionally, if not primarily, steps designed to simplify the Bond and Share system and Bond and Share itself at the apex of that system. ". . . Any plan for the compliance of the subholding companies must necessarily have been as a step toward the ultimate resolution of Bond and Share's over-all § 11 problems which were its primary concern."

Bond & Share took no step to contest that action.

[7] Bond & Share asked $100,000 for Drexel. The commission awarded $50,000.

(f) contains an express provision concerning fees. The subsection, applicable to court proceedings where a receiver or trustee has been appointed, makes all fees "to whomsoever paid" subject to the approval of the commission. Cf. Leiman v. Guttman (1949) 336 US 1, 93 L ed 453, 69 S Ct 371. Section 11(e) contains no such provision. It merely directs the commission to approve the plan, if it finds the plan "fair and equitable to the persons affected." The amount of fees to be paid by Electric plainly would be relevant to the question whether the plan was fair and equitable. See Re Public Service Corp. (CA3d 1954) 211 F2d 231, 232. Payment of excessive fees was one of the historic abuses of the reorganization procedure, whereby utility companies were milked, an abuse the Public Utility Holding Company Act sought to correct. 79 Cong Rec 4607; S Rep No. 621, 74th Cong, 1st Sess 33. Questions of fees payable by and to protective committees present special considerations irrelevant here and we put them aside. Cf. Leiman v. Guttman *supra*. Different considerations come into play when fees payable by individual security holders to their own counsel are involved. It would seem, for example, that the amount which a stockholder, say, agreed to pay his lawyer for representing him in an § 11 (e) proceeding would be no business of the commission. The amount of that fee would seem to have no direct bearing on the fairness of the plan.

But the fees payable by the registered holding company in connection with the reorganization of its subsidiary or affiliate are, or may be, different. At least Congress thought so, for Congress was explicit in making the fees payable by them, in connection with the transactions covered by § 10 and by § 12, subject to commission approval. Congress had before it the detailed record of holding company activities and knew that many of them had a proclivity for predatory practices. The fees were not only large; they were often loaded on affiliated companies[8] and concealed in intrasystem accounts. Congress decided to put an end to the worst of these practices and control the critical ones. When it came to the intricacies of holding company finance, Congress expressed the desire to have the amount of the fees paid brought to light and to have the commission decide who pays them and what amounts are reasonable. We cannot be faithful to that statutory design without granting the commission the jurisdiction asserted here.

Reversed.

Mr Justice FRANKFURTER, whom Mr. Justice BURTON joins, dissenting: Fully aware of the complicated interrelations of holding company systems, Congress did not enact a scheme for severance of all intercorporate relations among public utility interests. Instead, specific provisions were devised against specific abuses and the Securities and Exchange Commission was given specific authority to effectuate the defined functions of these different provisions. Enforcement of the act entailed authorization by the commission of reorganization to secure

[8] When Bond & Share asked that Electric reimburse it for the fees paid Drexel (see note 6, *supra*), it was following a traditional holding company practice of using the affiliated companies as convenient pocketbooks of the system.

simplification of a holding company system and regulation of transactions involving acquisitions and dispositions. Duly mindful of the abuses of excessive fees in the conduct of intercompany affairs, Congress effectively equipped the commission with power to regulate fees in the various proceedings which required approval by the commission. But Congress particularized. It did not vest this fee-fixing authority of the commission in a comprehensive provision. It dealt with the problem distributively. It was explicit in relating the power to fix fees to the particular proceeding.

The matter before us relates to the fixing of fees in a proceeding under § 11 of Holding Company Act. That was a proceeding for the reorganization of the Electric, a subsidiary of Bond & Share. That section gave the commission full power to fix fees to be paid by Electric as a condition to approval for its plan for reorganization. To be sure, Electric's plan involved the parent, Bond & Share and the confirmation of Electric's plan required approval by the commission of "acquisition" by Bond & Share of new securities. That approval under § 10 subjected the fees which Bond & Share could pay Drexel to the scrutiny and approval of the commission. The consummation of Electric's plan likewise involved a "sale" by Bond & Share under § 12. Again, that section made Bond & Share's payment of fees to Drexel subject to the commission's approval. The commission gave the required approval to the "acquisition" and "sale" under §§ 10 and 12, respectively, without passing on the fee payable by Bond & Share or reserving the question of the propriety of such fees. The reservation regarding fees in the proceedings of Electric was applicable to the fees in connection with Electric's plan under § 11, and cannot be made to supply the failure to fix or to reserve the matter of fees in the proceedings under §§ 10 and 12 in relation to which they were incurred.

The Holding Company Act of 1935 is a reticulated statute, not a hodgepodge. To observe its explicit provisions is to respect the purpose of Congress and the care with which it was formulated.

I would affirm the court of appeals.

CALIFORNIA PUBLIC UTILITIES COMMISSION

C. E. Holman

v.

Pacific Gas and Electric Company

Decision No. 51094, Case No. 5576
February 7, 1955

ACTION *to recover alleged overcharge for electric service supplied agricultural pumping installation; dismissed.*

Reparation, § 32 — Filed tariff as bar to recovery.

1. The owner of property leased to a tenant may not recover reparations for an alleged overcharge for electric service supplied to an agricultural pumping installation on the property, where the company has based its rates on a regularly filed tariff, p. 160.

Reparation, § 48 — Electric service — Proper party.

2. The owner of property leased to a tenant is not a proper party complainant in a reparation proceeding to recover an alleged overcharge for electric service supplied to an agricultural pumping installation on the property, p. 160.

APPEARANCES: C. E. Holman, complainant; F. T. Searls and John C. Morrissey, for defendant.

By the COMMISSION: In this complaint, filed September 22, 1954, C. E. Holman seeks reparations for an alleged overcharge made by Pacific Gas and Electric Company for electric service supplied to an agricultural pumping installation located on the property of the complainant near Oakdale.

The matter was heard before examiner F. Everett Emerson on December 13, 1954, at Modesto and was submitted for decision on that date.

In effect, complainant alleges that he and tenants of his farm near Oakdale were overcharged by defendant during a period when two pump motors, one of 7½ hp and one of 20 hp served through one electric meter, were not connected to a double-throw switch and that he, as owner of the farm and its pumping facilities, has had to reimburse his tenants for the difference in billing between defendant's charges for a usage of 27½ hp and those for 20 hp which complainant believes is proper.

Defendant denies making any overcharge to either complainant or his tenants and avers that all billings for service to the pumps have been made strictly in accord with its reglularly filed rates and rules applicable to such service.

Defendant's practice for many years as well as the specific tariffs under which agricultural power service is rendered has been to compute the basic

connected electric load as "the sum of the rated capacities of all of the customer's equipment that may be connected to the company's lines at the same time, computed to the nearest one-tenth of a horsepower."

The evidence is clear that in so far as agricultural pumping service is concerned complainant's original load consisted of a 7½-hp pump used to lift water from an irrigation canal onto the land. Under such operation, complainant could irrigate only at such times as water was in the canal. Desiring to irrigate at other times, he sank a well on his property and installed a pump therein driven by a 20-hp electric motor. Complainant signed a contract on March 8, 1950, which, among other things, listed the 20-hp pump as the total load to be connected.[1] Service to the new pump was established by defendant on June 28, 1950. Defendant's electric lines to the 7½-hp pump were disconnected and at about the same time complainant installed his own electric line from the location of the 20-hp pump to the 7½-hp pump so that either pump might be used, as complainant might desire. Complainant was notified by one of defendant's employees that in order for complainant to be billed only for a connected load of 20 hp it would be necessary for complainant to provide a double-throw switch between the wires to the two pumps so that only one pump could be operated at one time. Such switch was not immediately installed. Complainant was billed only for a connected load of 20 hp for about eight months thereafter, during which time argument ensued between complainant and various of defendant's employees as to the suitability or wiring of a switch complainant had on hand. However, complainant has never been billed for a connected load in excess of 20 hp.

During 1951 complainant leased his farm to one J. D. Anderson and the electric account was transferred to such party by means of a contract[2] whereby said J. D. Anderson would continue the unexpired term (May 26, 1951, to June 28, 1953) of complainant's prior contract. The account continued to be billed at the rate for 20 hp. However, J. D. Anderson was informed that the double-throw switch would be required or the billing would be based upon a connected load of 27½ hp. No double-throw switch having been made operative, the account was billed at the rate applicable to 27½ hp on August 1, 1951.

On December 8, 1951, the account was transferred to one George W. Anderson by means of a contract[3] whereby this party assumed the original term of complainant's contract. It continued to be billed at the 27½-hp rate.

The same account was again transferred on July 31, 1952, from this party to George E. Anderson and J. D. Anderson, who signed a contract[4] for a 27½-hp connected load for a period of one year.

The 27½-hp account was next transferred from George E. Anderson and J. D. Anderson to Howard Holman, a son of complainant, on July 13, 1953,

[1] Contract No. 73751, Exhibit No. 4 in this proceeding.
[2] Contract No. 73963, Exhibit No. 5 in this proceeding.
[3] Contract No. 74069, Exhibit No. 6 in this proceeding.
[4] Contract No. 74166, Exhibit No. 7 in this proceeding.

by a one-year contract.[5] On April 10, 1954, an employee of defendant determined that a proper double-throw switch had been installed and was operating so as to limit the possible connected load to 20 hp, and the account has been billed on such basis for the 1954 agricultural year.

[1, 2] The evidence is clear that defendant has served the complainant and subsequent parties in accordance with its regularly filed tariffs and rules applicable to such service and we so find. Moreover, complainant has never paid more than the charge properly made for a connected load of 20 hp and was not a customer of defendant during the period when bills were rendered to his tenants at the 27½-hp rate. Therefore, he is not the proper party complainant in a reparation proceeding. It follows that the complaint must be dismissed.

Although defendant's legal position is sound, defendant's public relations might have been improved had its employees early informed the complainant and his tenants of the physical arrangements necessary to make the lesser billing provisions of the tariffs available to them. The performance of defendant's employees in this case leaves much to be desired in such respect.

Based upon the evidence and the foregoing findings in respect thereto,

It is hereby *ordered* that this complaint be and it is dismissed.

[5] Contract No. 74330, Exhibit No. 7 in this proceeding.

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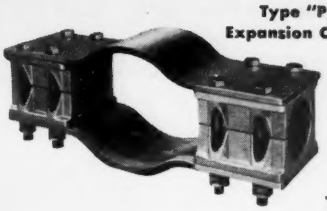
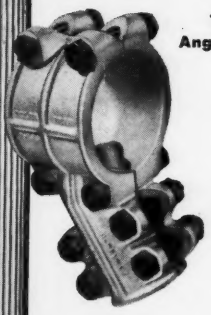


Type "PXPL"
Expansion Connector

Type "TU"
T-Connector

Type "FTE"
Angle T-Connector



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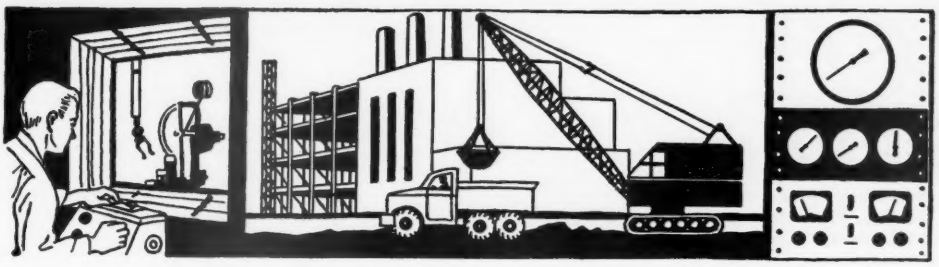

Industrial Progress

Long Island Lighting to Spend $50,000,000 in 1955

LONG Island Lighting Company anticipates the addition of about 34,000 new electric and 19,000 new gas customers this year, according to Errol W. Doebler, president. Cost of new facilities in 1955 is estimated at $50,000,000, which compares with 1954 expenditures of $40,000,000. Most of the increase is in the electric department and is due in part to the expenditures on the new Edward F. Barrett power station and the transmission network which will link the plant with the system.

Columbus & So. Ohio Plans $34,000,000 Station

PLANS for the construction of a new electric generating station by Columbus and Southern Ohio Electric Company were announced recently by J. B. Poston, president.

The initial installation will consist of one 125,000 kilowatt generating unit with necessary transmission lines to connect the unit to the company's system. Construction is expected to start about October 1st this year and operation of the unit is scheduled for the 4th quarter of 1957. An expenditure of approximately $34,000,000 is expected to be necessary to complete this first phase of construction for the new plant.

Although present plans involve only the construction of the first unit, the ultimate size of the plant will be determined by the future power needs of our service area.

Since the end of World War II, the generating capacity of Columbus and Southern Ohio Electric Company has increased from 210,000 to 460,000 kilowatts. Upon completion later this year of an additional generating unit at the Picway plant south of Columbus the company's total capacity will be 560,000 kilowatts. The new unit will bring the total capacity to 685,000 kilowatts.

$25,000,000 Unit Planned By Jersey Central Pwr. & Lt.

JERSEY Central Power & Light Company's $25,000,000 power addition to its Raritan river station, Sayreville, capable of producing 137,500 kilowatts of electricity at full capacity, was recently put into operation, Clyde A. Mullen, vice president in charge of operations, announced.

The new power unit is the second addition at the company's Raritan river station in the past six years. It increases the electric generating capacity at this station from 98,000 to 235,000 kilowatts, or 140 per cent.

Mr. Mullen said that JCP&L has nearly tripled its power capacity in the postwar period.

Westinghouse Issues Booklet on Capacitors for Utility Systems

A 16-page booklet "Capacitors for Utility Systems" is available from Westinghouse Electric Corporation.

Arranged to provide maximum aid to users in selecting the best power capacitor for every application, the booklet matches various capacitor applications on transmission and distribution systems to the best capacitor unit for the job. These applications are presented graphically and discussed in detail.

The capacitor types discussed include: the stack-type for high voltage applications; metal-enclosed units for indoor and outdoor use; low-voltage

(*Continued on page* 28)

units for secondary network vaults; automatically-switched types for primary distribution circuits; pole-mounted types for unswitched applications on primary distribution; units for secondary distribution; and industrial units.

In addition, the design features of the universal inerteen power capacitor that is used for all the various units is described and illustrated.

For a copy of booklet B-6136, write Westinghouse Electric Corporation, P. O. Box 2099, Pittsburgh 30, Pa.

"Out of Darkness" Film Released By General Electric

"OUT of Darkness," a 26 minute motion picture which dramatically illustrates the relation of modern street lighting to traffic safety and night crime reduction, has been released by the General Electric Company.

Produced for G-E by the March of Time, "Out of Darkness" vividly documents how one U. S. community faced and solved the problem of inadequate street lighting. Statistics from city officials, police chiefs, and safety organizations, concerning cities and towns where modern lighting has been installed, are emphasized.

The film is the main element of the company's More Power to America Street Lighting program. These programs are designed to help increase the nation's standard of living and industrial productivity by stimulating broader, more efficient use of electricity in industry, in the community and on the farm.

According to L. Byron Cherry, general manager of G-E's Outdoor Lighting Department, "More than 90 per cent of the nation's streets are inadequately lighted. The price of this condition is reflected in the ever-climbing rate of after-dark crime and traffic accidents in our cities." The G-E general manager pointed out that installation of modern street lighting provides at least a partial solution to nighttime crime and traffic accident problems.

"Out of Darkness" tells the story of how a young city manager—concerned with his city's inadequate street lighting, high incidence of assaults, and nighttime auto accidents—convinces his fellow residents, after considerable resistance, that a new lighting system should be adopted. Enacted by both professional actors and actual residents of cities where the film was photographed, it employs a mythical but typical location—Fort Butler, U.S.A.

"In addition to its role as an anti-crime and traffic accident agent, modern lighting stimulates community growth and promotes a strong sense of pride among citizens," Mr. Cherry said. "Frequently, a new lighting system will serve as an attraction both to new residents and commercial organizations," he added.

"Out of Darkness" is available on a one-time loan basis for showing by civic organizations and interested groups, through General Electric Apparatus Sales offices throughout the nation. It is also for sale to electric utilities for $75.

John Buehler to Betchel Corporation

JOHN P. Buehler has been appointed an executive engineer with the Bechtel Corporation. He will be attached to the Power Division at San Francisco headquarters, assisting Vice President John R. Kiely on special studies and assignments, particularly those of a hydro-electric nature.

(*Continued on page* 30)

INDUSTRIAL PROGRESS
(*Continued*)

Kuljian Appointment

HILTON A. Levonian has been appointed vice president in charge of consulting engineering of The Kuljian Corporation, engineers and constructors, according to an announcement by Arthur H. Kuljian, vice president, engineering. With headquarters in the main office in Philadelphia, Mr. Levonian will cover the far-flung activities of his department both in the United States and in many foreign countries.

B & W Bulletin

A 20-PAGE bulletin, designed to provide operators of stationary and marine boilers with an authoritative guide for selecting the most efficient and economical refractories for their boilers, has recently been prepared by the Refractories Division of The Babcock & Wilcox Company. The bulletin, entitled "Boiler Refractories" discusses the importance of selecting the proper refractory materials and the basic requirements they must meet to avoid the chief causes of refractory failure.

Copies of the bulletin are available upon request to the division's general offices: 161 E. 42nd street, New York 17, N. Y.

Delta-Star Electric Div. Announces New Development In Isolated Phase Bus Construction

DELTA-STAR Electric Division, H. K. Porter Company, Inc., of Pittsburgh has just announced a new and improved isolated phase bus for all current ratings up to 10,000 amperes and voltages to 34.5 kv. According to the announcement, this new construction marks the first major advance in isolated phase bus construction in the past decade.

The announcement states that this new design permits ease and economy of installation never before possible. New telescoping covers save time in opening the bus for inspection or maintenance. All longitudinal gaskets, all supporting ring gaskets and cover bolts normally employed are eliminated. Longitudinal sections 6 to 8 feet long can be pre-assembled and shipped in lengths as large as customer's facilities can handle. All preassembled conductor joints are prewelded. Corners and tees are shipped from factory complete with conductors and insulators.

Full data may be obtained from the manufacturer.

(*Continued on page* 32)

YOUR Special Advantage for MAY!

. . . . this is the SPECIAL ADVANTAGE STICKER which dozens of companies are using this month on the front cover of Electrified Industry. →

THE SPECIAL ADVANTAGES of electric service include: . . Convenience . . . Flexibility . . Instant Starts . . . Economy . . . Reliability . . Cleanliness . . . Good Regulation . . . Ability to take Overloads . . . and the Cooperation and Advice on Electrical Problems which most power companies offer.

Customers are reminded of you and of the SPECIAL ADVANTAGES of being on your lines. In addition your stickers help them route your messages to additional readers.

Some companies make up stickers which carry their own slogan (a good idea). Others have Reddy Kilowatt remind the readers that electric power is their willing servant.

Power salesmen make friends for your companies and add to your "net divisable." Years ago they decided that they needed help to overcome the effects of the competitive power, diesel-and-steam, agin-the-utilities magazines that they saw on their customers desks. They helped create the picture magazine which tells the true story that electricity, properly used, is worth many times its cost.

They use this magazine to make 21¢ calls for them in between the $5 and $10 calls they make in person.

By using Electrified Industry they are able to maintain better-than-ever customer contact and increase the net revenue of the utilities.

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Martin Publications—20 No. Wacker Dr., Chicago 6

Public Service Electric & Gas to Spend $90,000,000 This Year

CONSTRUCTION expenditures of Public Service Electric and Gas Company will be about $90,000,000 this year, of which approximately $60,000,000 will be for electric facilities and $30,000,000 for gas facilities, according to announcement by Lyle McDonald, board chairman. Construction expenditures in 1954 totaled $88,700,000 and in the last five years the company has spent $335,000,000 for additions to plant.

The new electric generating station at Linden, construction of which is under way, is scheduled to be placed in service in 1957, with an initial capacity of 450,000 kilowatts. According to the announcement, the new station is expected to be one of the most economical fuel-burning electric generating stations in the country. A new 185,000 kilowatt unit, now under construction at Burlington electric generating station, is expected to be placed in operation this Fall.

New Sales Brochure Announced By Marmon-Herrington

A NEW eight-page brochure tells the complete Marmon-Herrington All-Wheel-Drive story.

Action illustrations, All-Wheel-Drive applications, model descriptions, specifications are included in the brochure. A large inside spread illustrates a Marmon-Herrington Ford chassis and describes six Marmon-Herrington Ford features: constant velocity universal joint steering ends; full floating front driving axles; husky, heavy duty truck engines; heavy duty synchro silent transmissions; extra strong reinforced frames; gear driven auxiliary transmissions.

Copies of the brochure are available by writing to Sales Promotion Manager, Marmon-Herrington Company, Inc., 1519 West Washington street, Indianapolis, Indiana. (Ask for No. 550301.)

Northern States Power Plans $104,400,000 Expansion

NORTHERN States Power Company estimates that it will spend $51,400,000 on construction in 1955.

The company reported construction expenditures of nearly $177,000,000 in the last five years, including $49,133,000 in 1954. The budget figure for 1956 is $53 million.

Last year's expansion included the completion of the company's first 100,000-kilowatt generating unit, at the Black Dog plant south of the Twin Cities, which raised total generating capacity to 1,133,630 kw. at the end of 1954. Another unit of the same size will go into service at that plant this year and a third one of like capacity at the plant in St. Paul next year.

Philadelphia Electric to Build 175,000-kw Unit

PHILADELPHIA Electric plans to install a new 175,000-kilowatt electric generating unit at the company's Schuylkill generating station at 28th and Christian streets in Philadelphia.

Relocation of equipment to provide space for the unit is now under way and construction is scheduled for November, 1955. The unit is expected to be completed in 1958.

The new turbo-generator, which will be one of the largest and most efficient on the system, is being installed to help meet the growing demand for electric power in that area. It will produce enough power to meet the electrical needs of more than 300,000 homes.

The turbine portion of the new unit will be designed so that steam can be extracted to help meet increased demands on the company's steam heating system. The new 175,000-kilowatt electric generating unit will replace four early-type generating units, totaling 44,000 kilowatts capacity.

G-E to Build Unit for Niagara Mohawk Power

THE largest steam turbine-generator ever installed in New York state will be built for the Niagara Mohawk Power Corporation by the General Electric Company, it was announced recently by R. S. Neblett, marketing manager of G-E's Large Steam Turbine-Generator Department.

The 200,000-kilowatt unit will be installed in the Charles R. Huntley steam station near Buffalo. It will replace three 20,000-kw G-E built units originally installed in the Huntley station in 1916-17.

Scheduled to be placed in operation in 1957, the new turbine-generator will raise the generating capacity of the Huntley station to over one million kilowatts.

The unit will be of the cross-compound, single-flow, close coupled, reheat design. This will be the first single-flow unit of this design in the country.

This machinist is "miking" a disc for one of the largest butterfly valves ever built — 192" diameter. Newport News built 3 such valves, each weighing 446,000 lbs., for the Ross Power Plant, Skagit Project, Department of Light, City of Seattle, Washington. Designed for a water flow of 3,620 cu. ft. per sec., and a hydrostatic pressure of 290 psi., these valves were shop tested by Newport News at 450 psi. They are hydraulically operated with oil at 1,500 psi. pressure.

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